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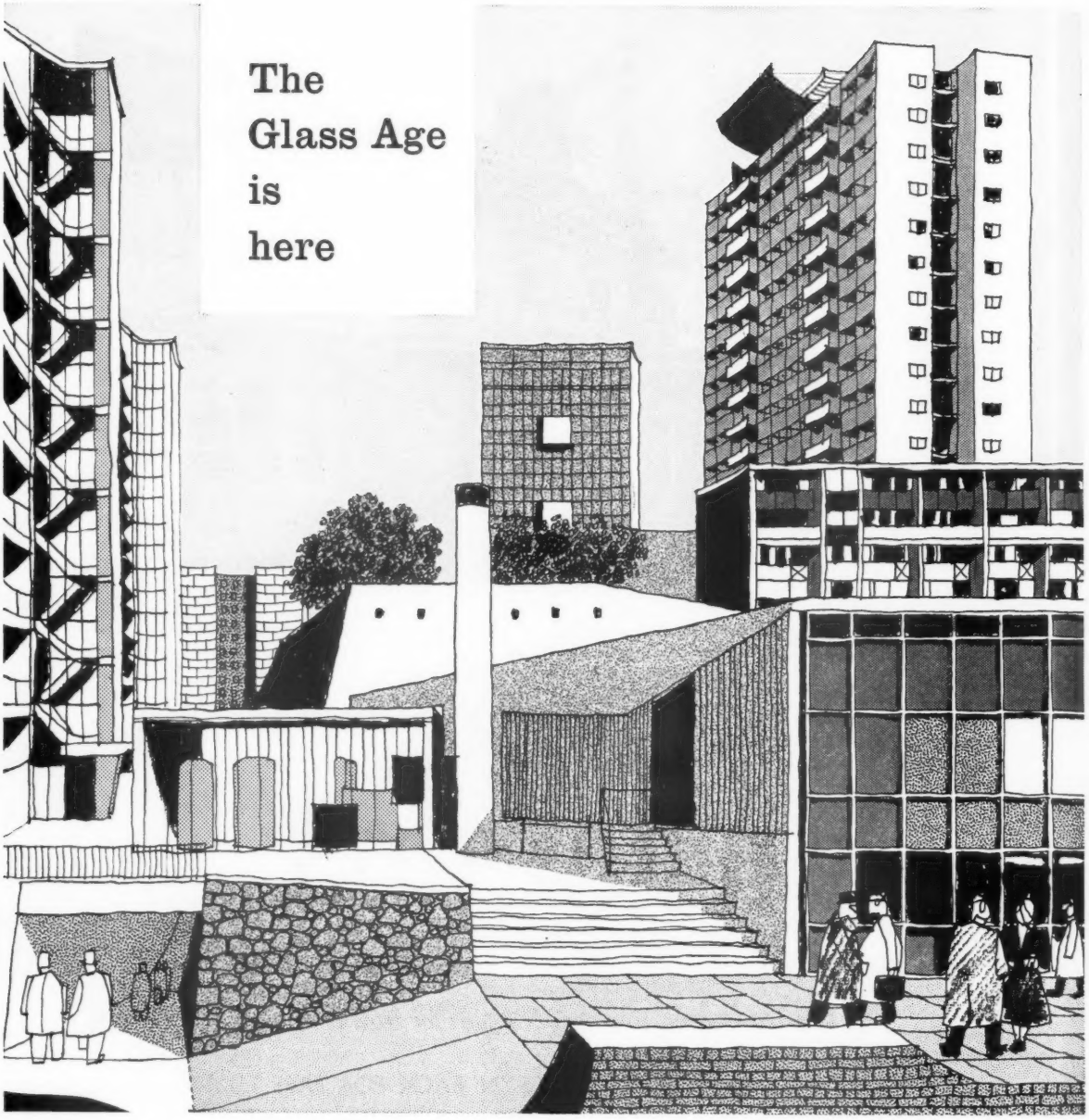

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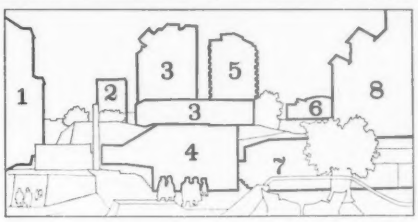

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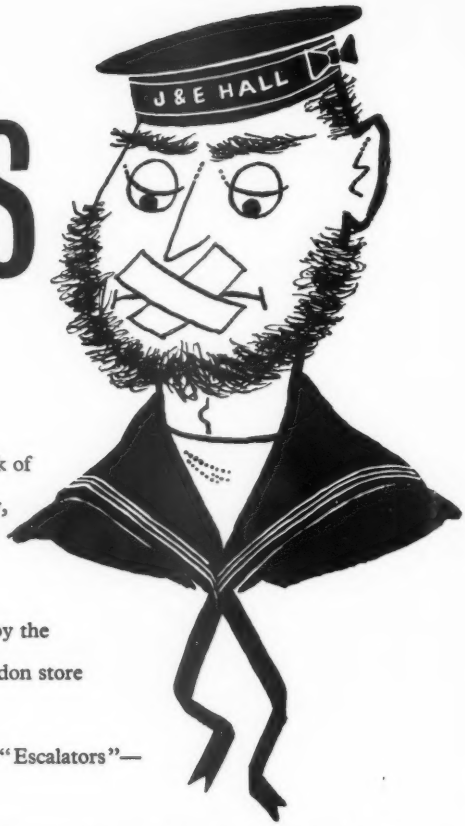

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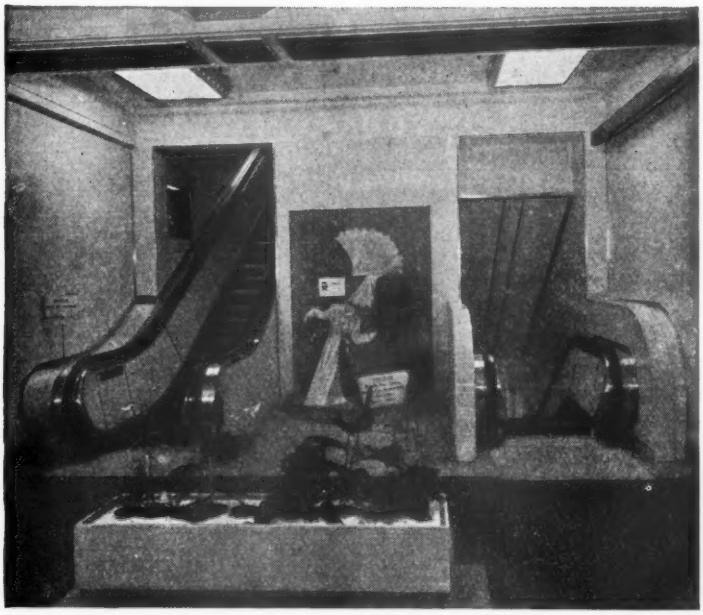

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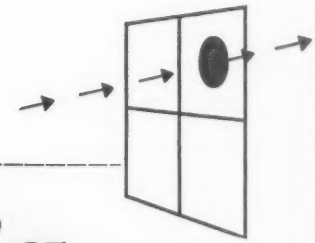

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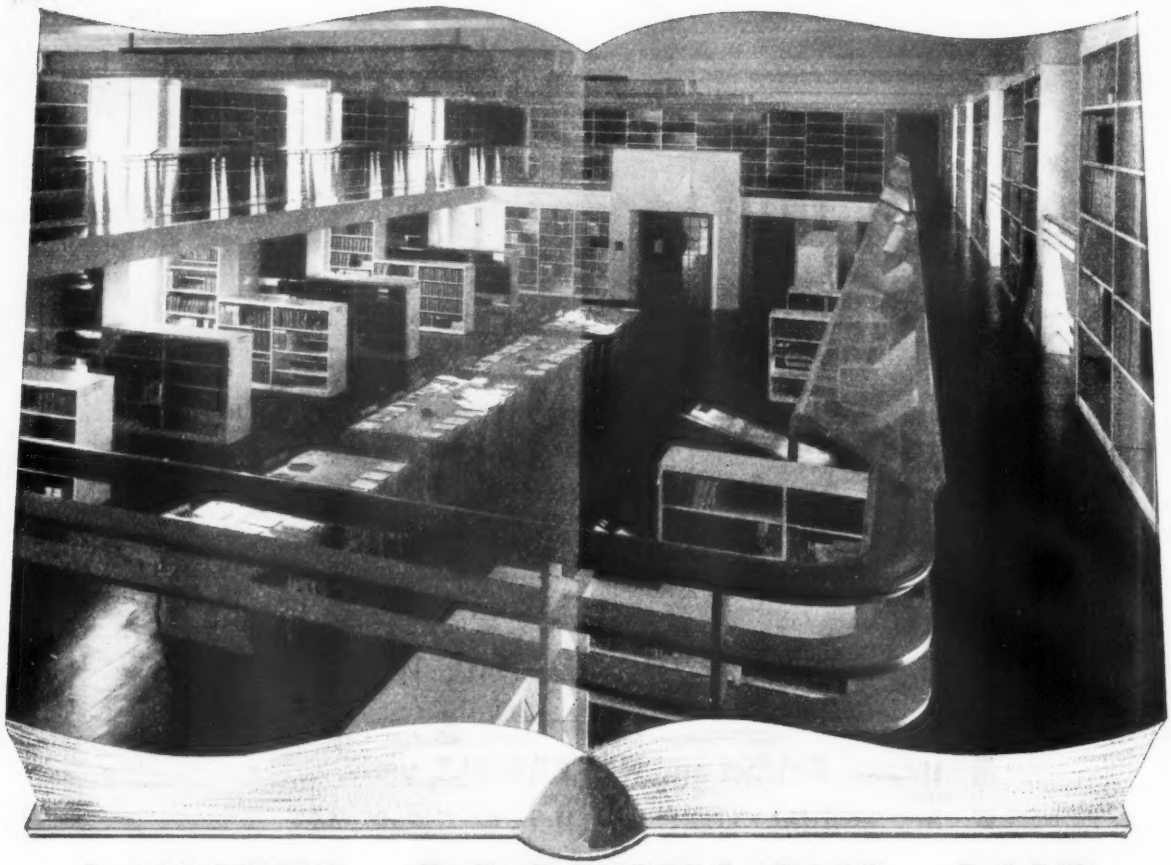

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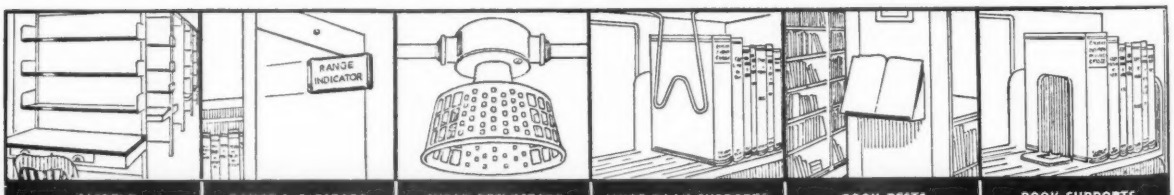

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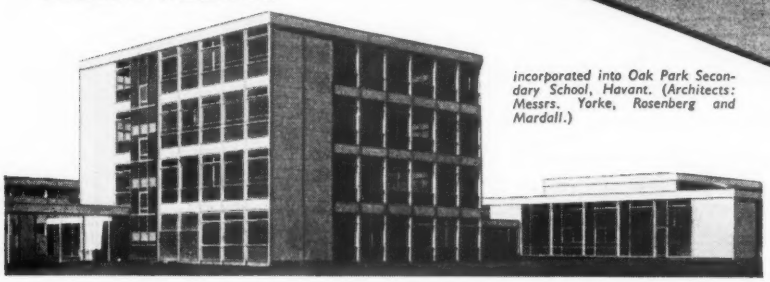

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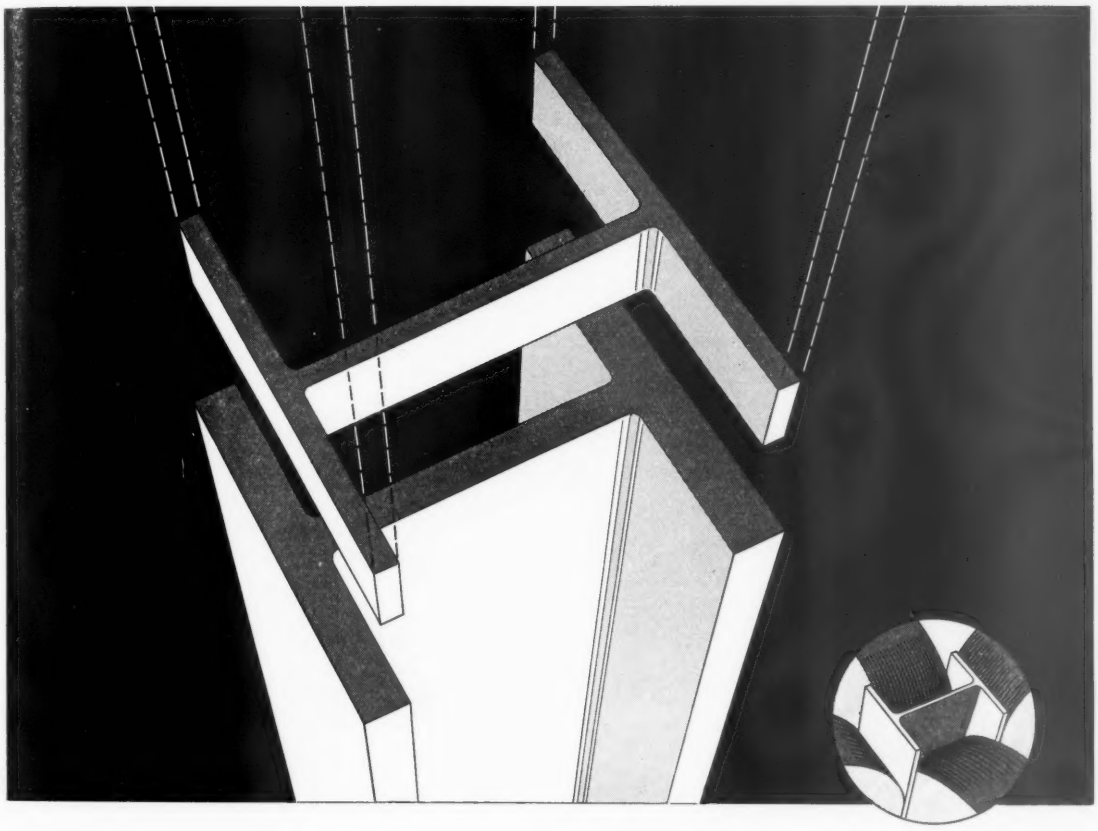

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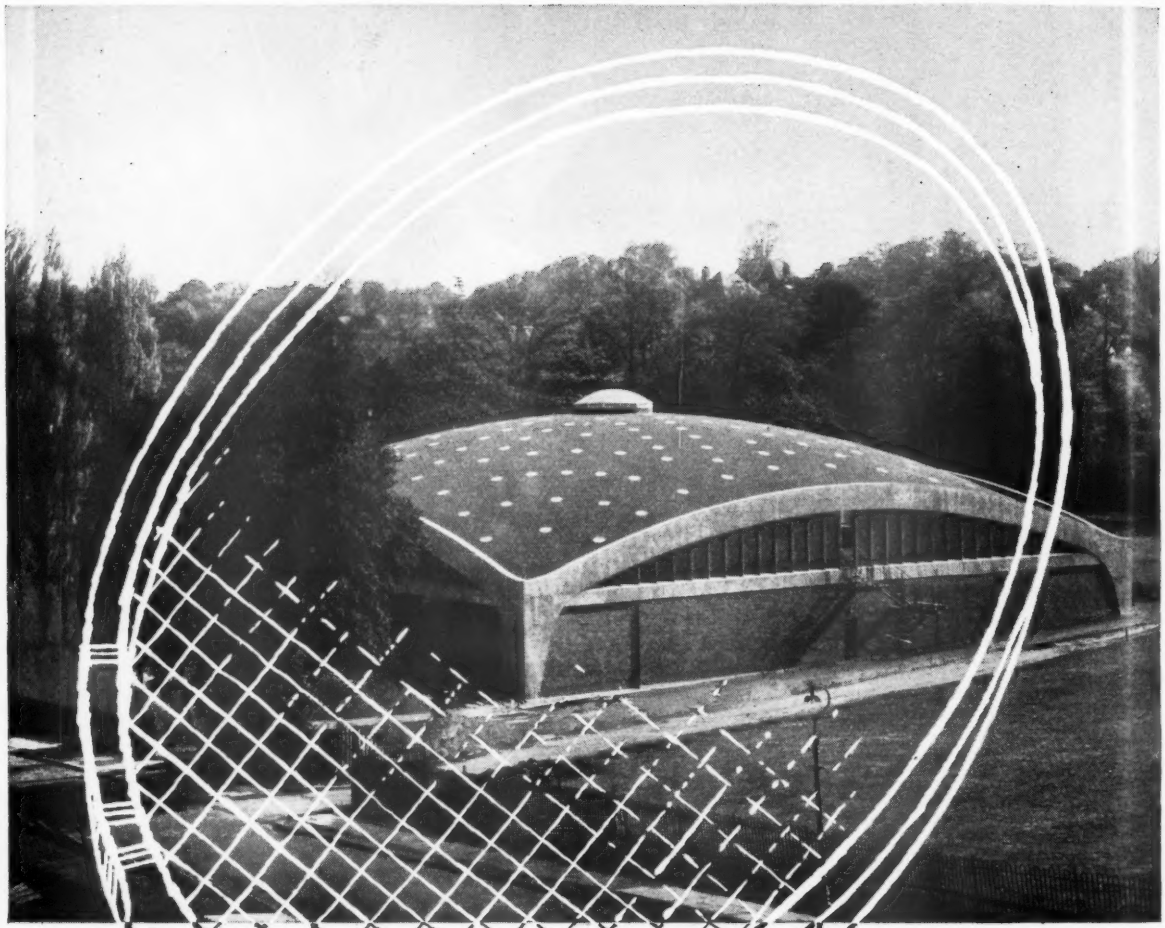

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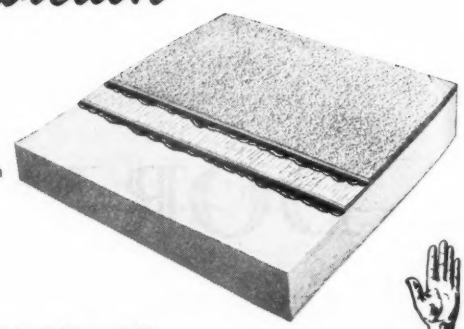

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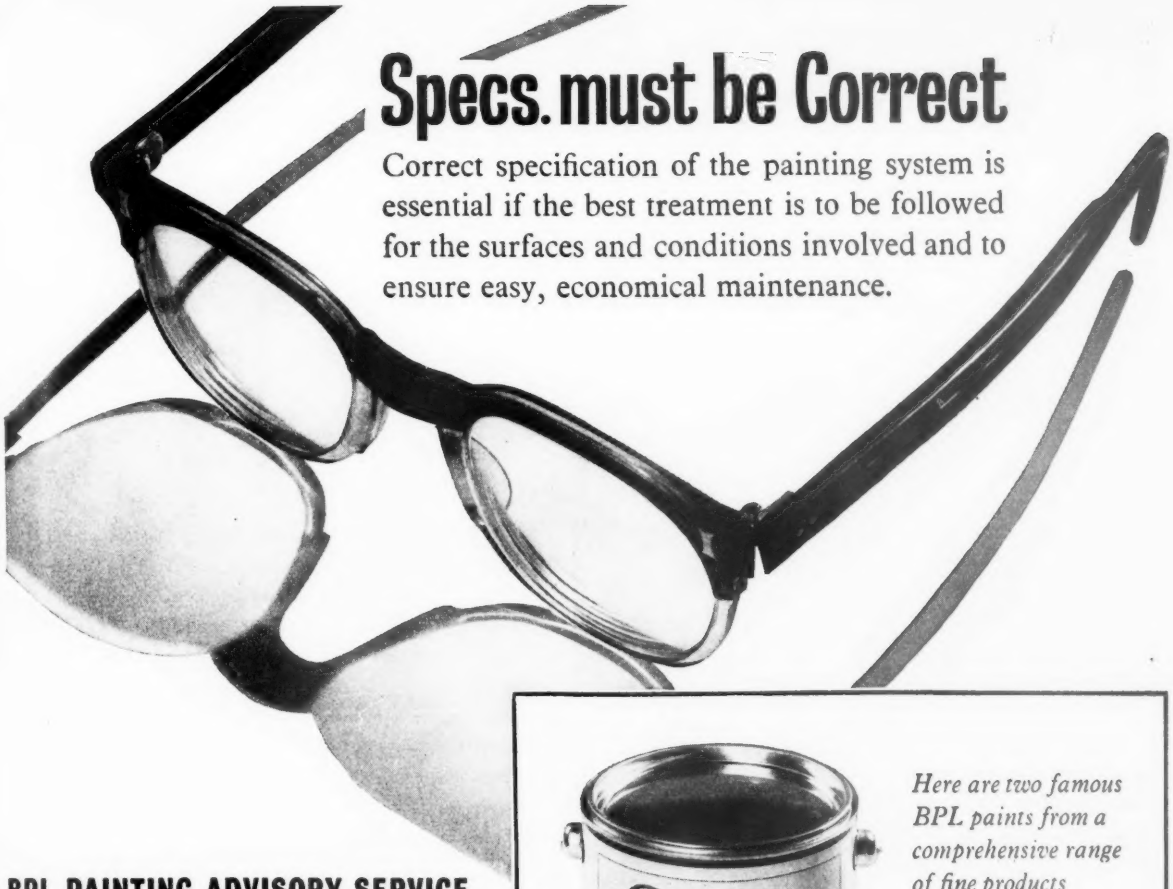

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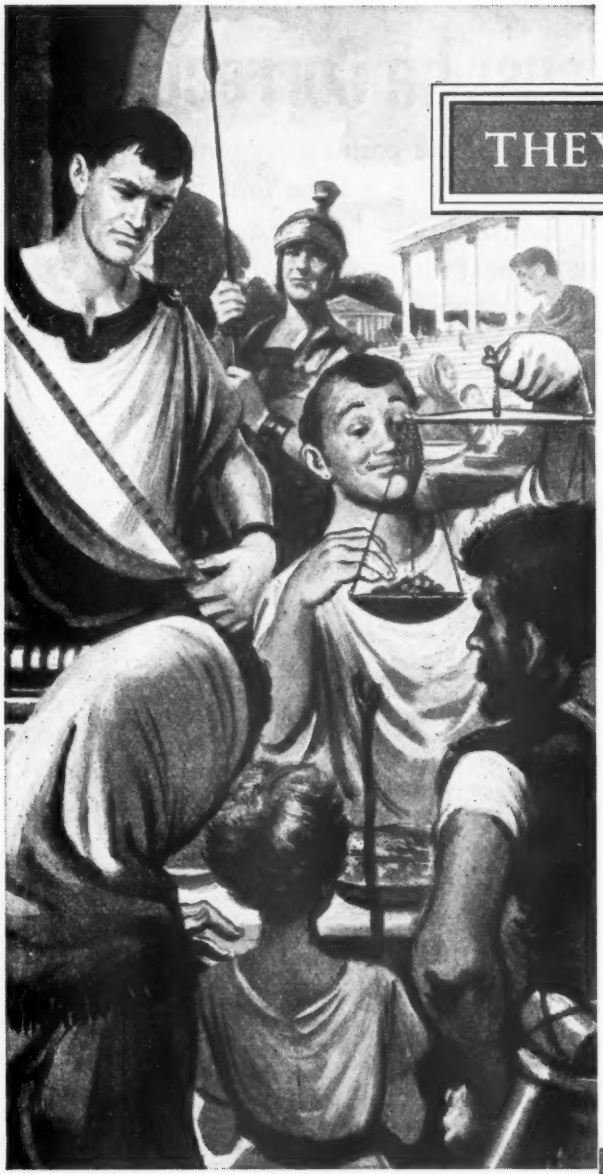

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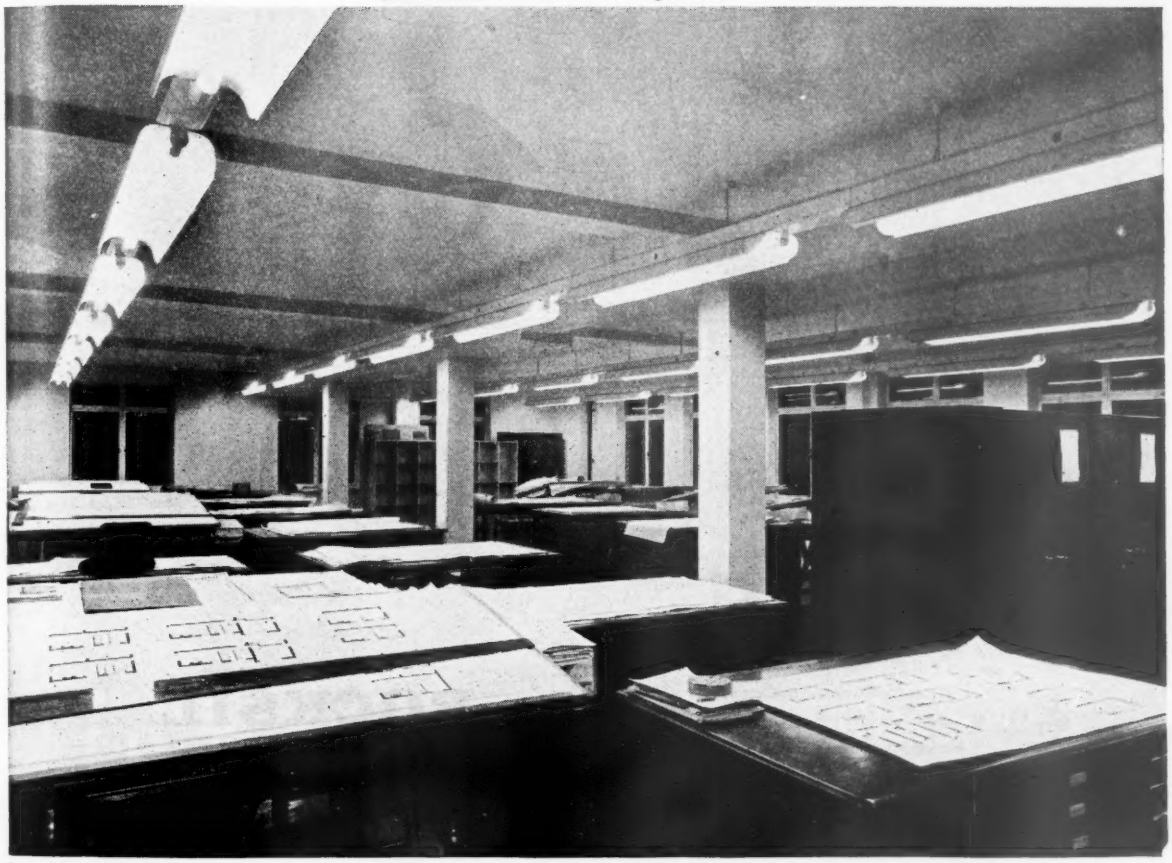

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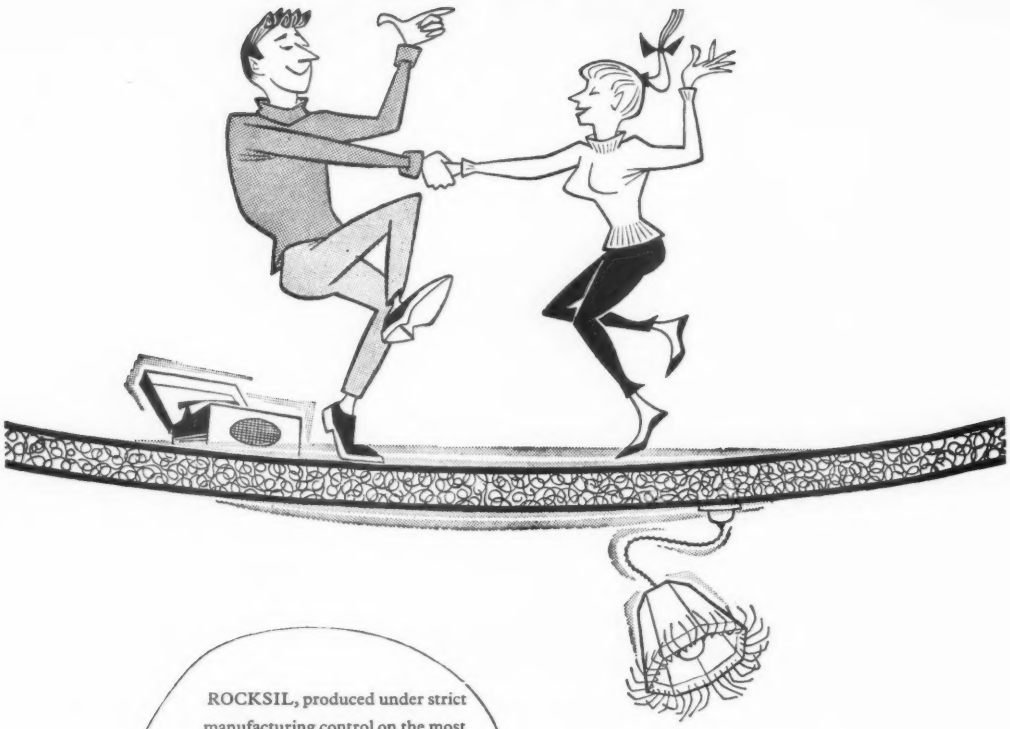

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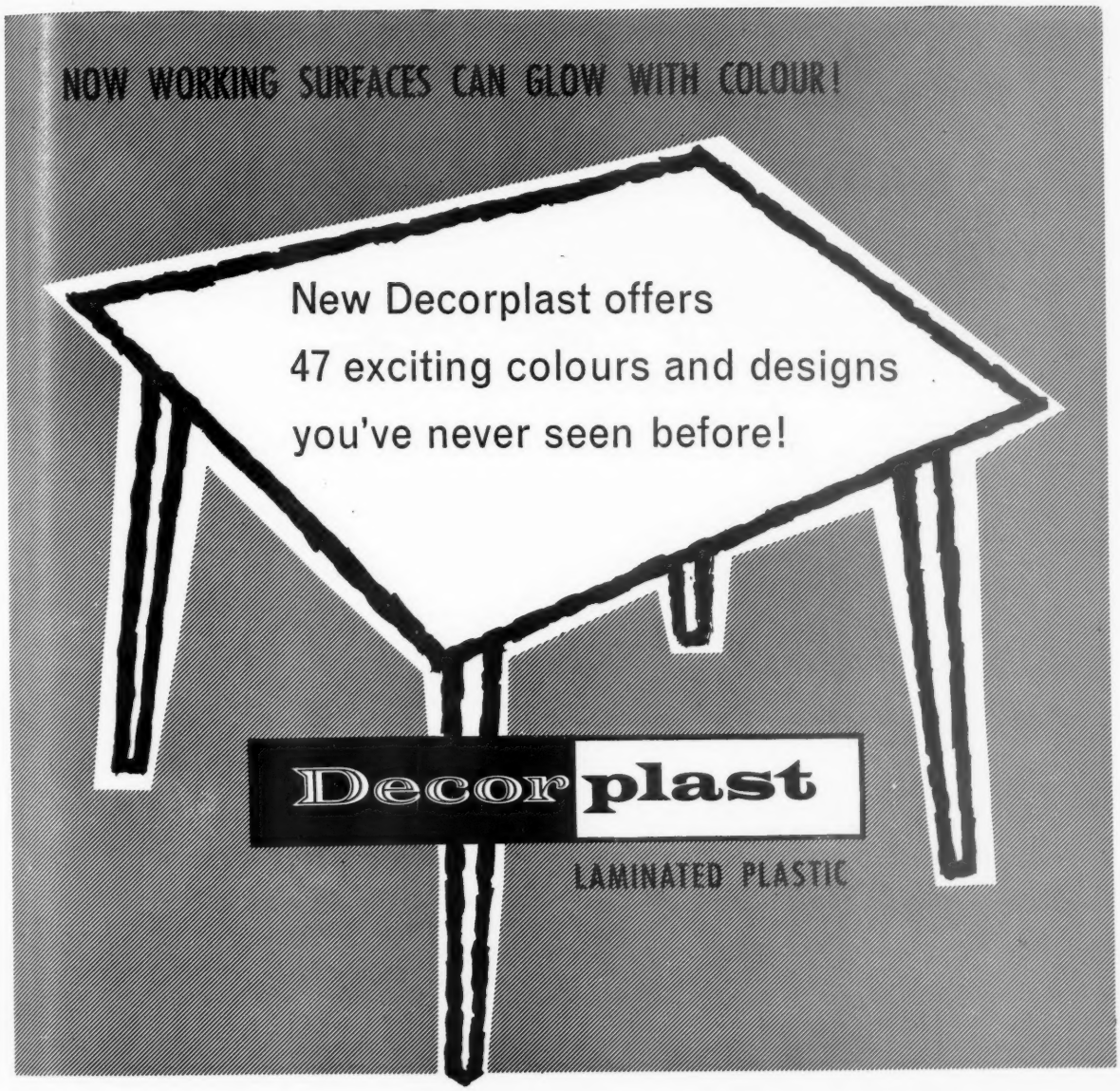

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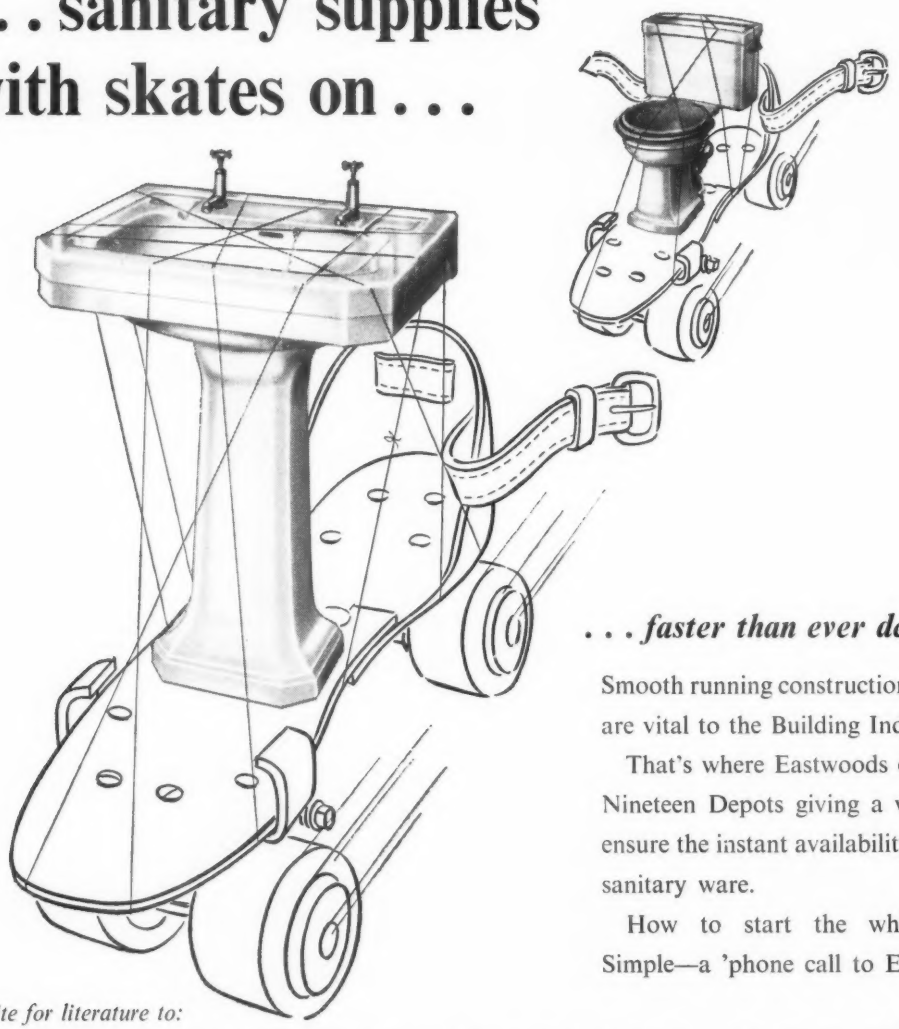

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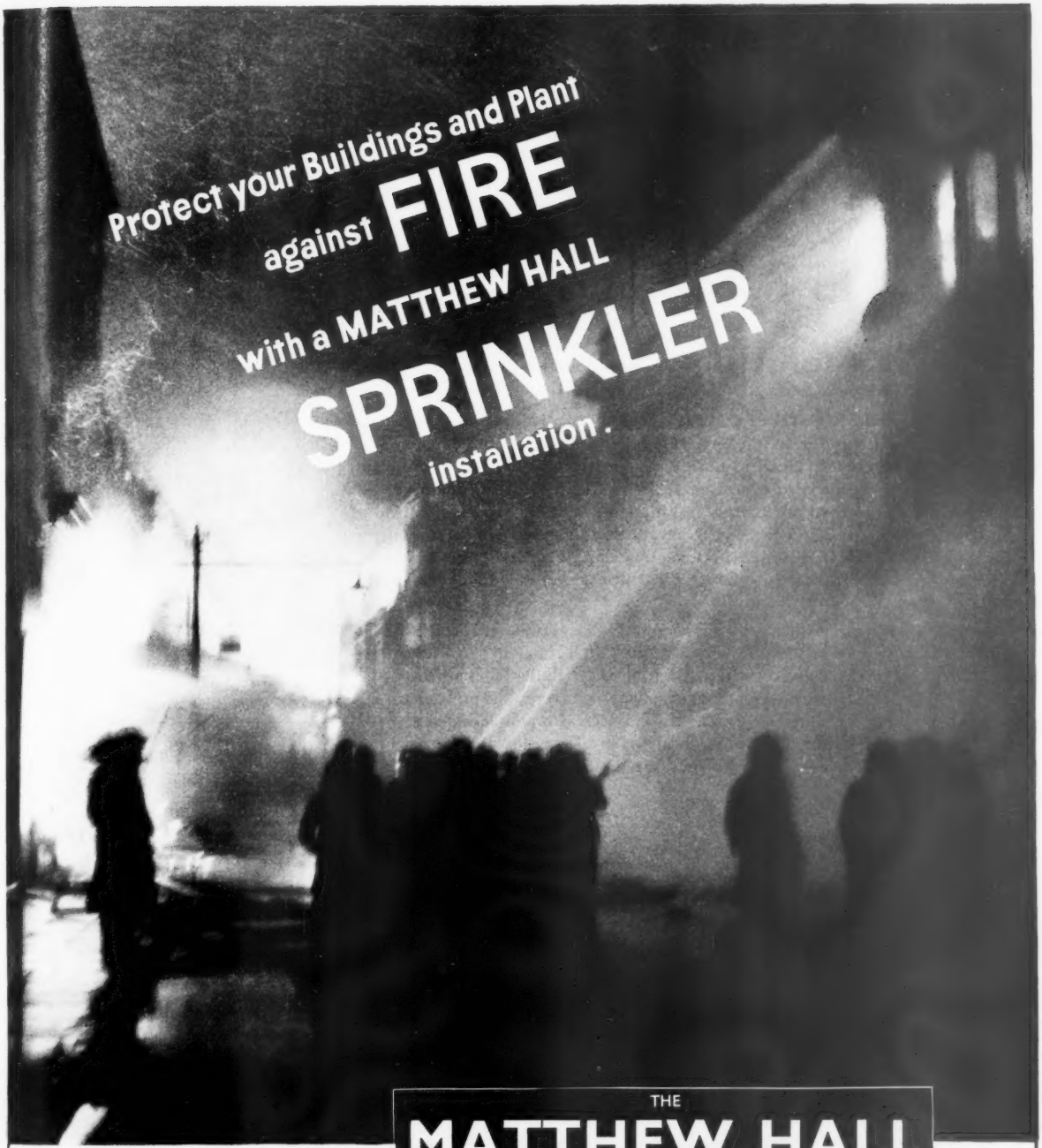

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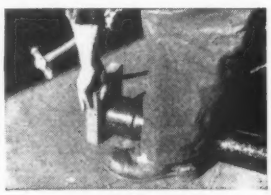

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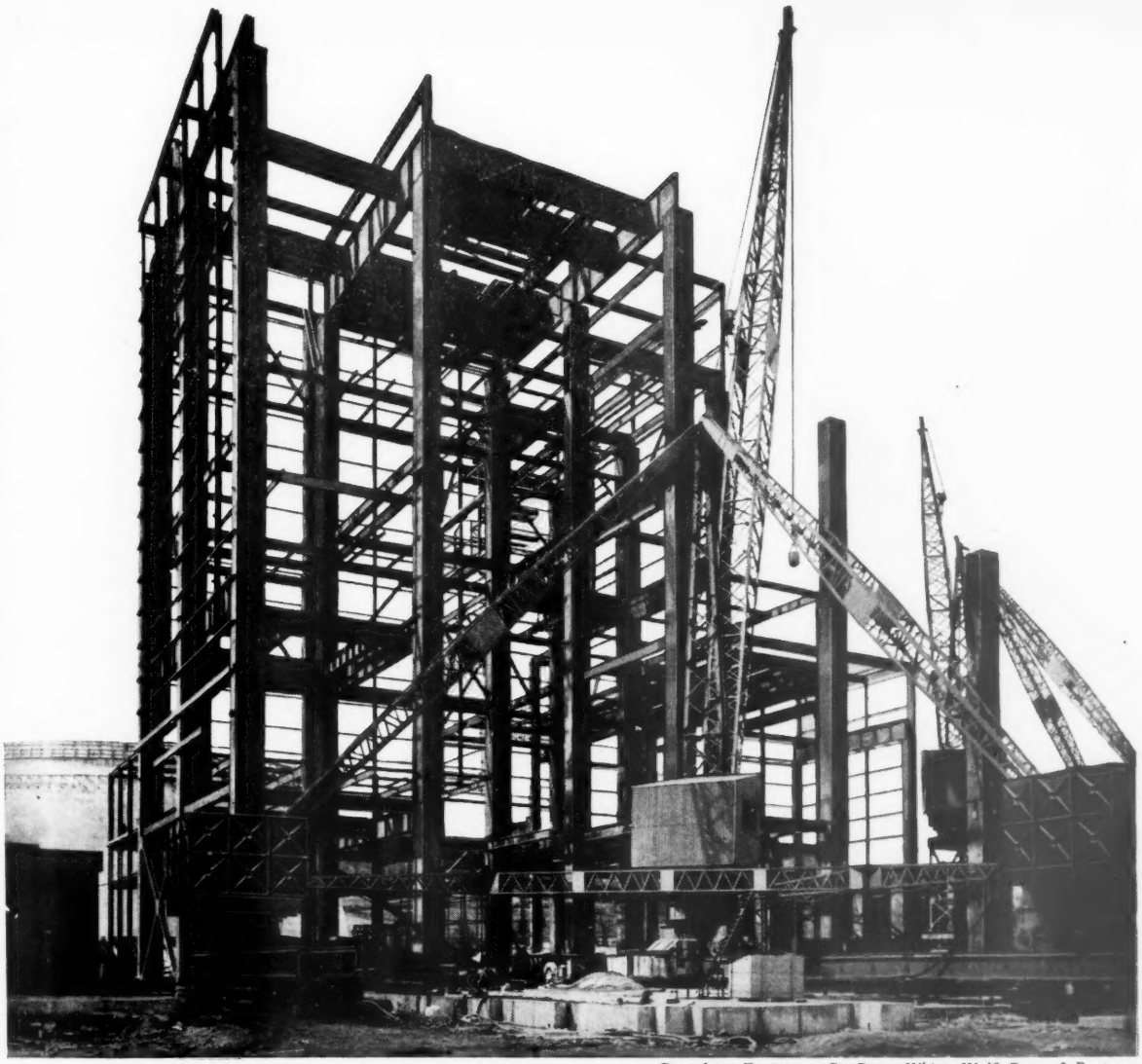

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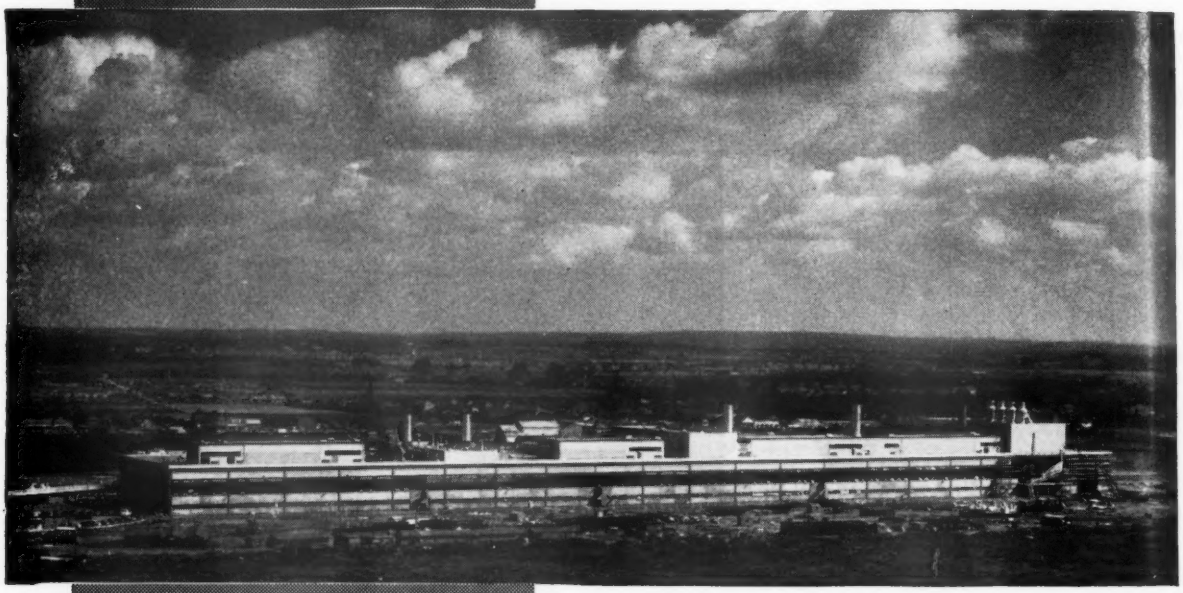

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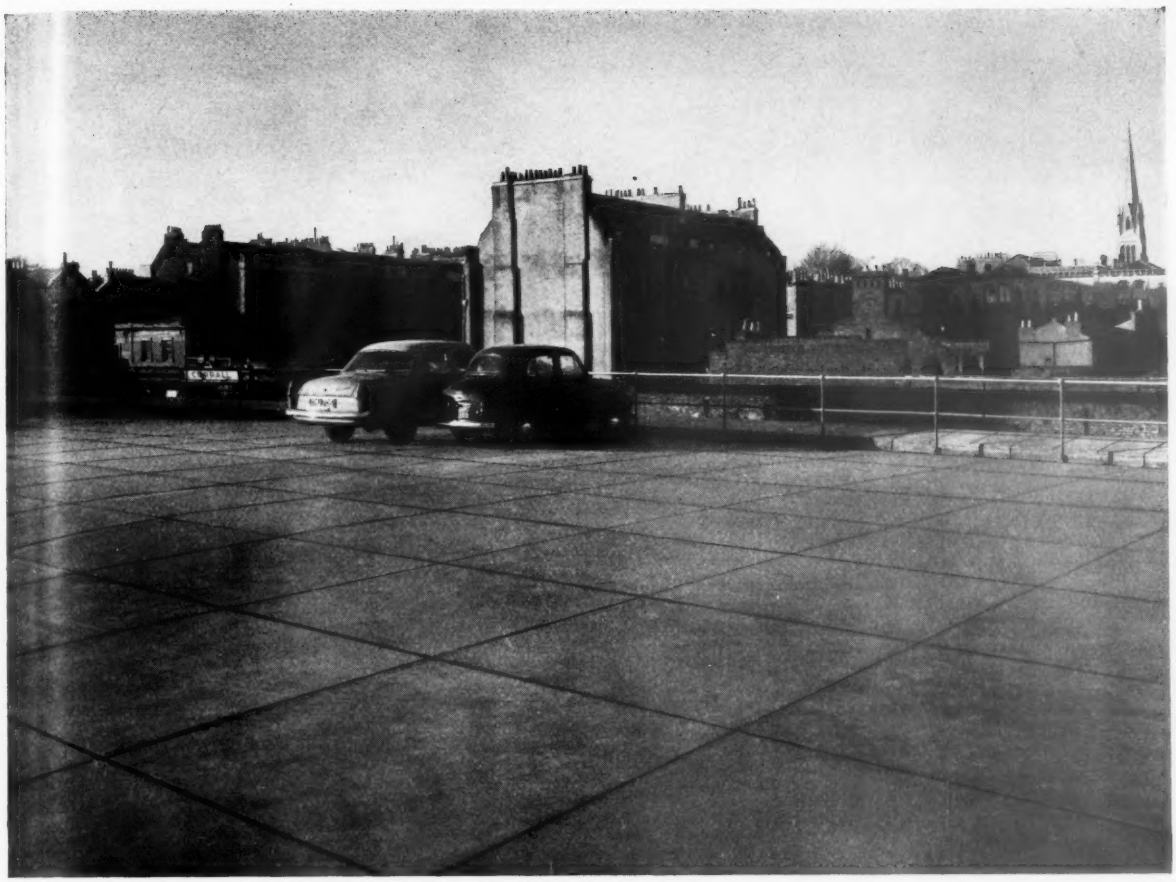

Architect: C. W. Hutton, B. Arch., F.R.I.B.A. General Contractors: C. H. Pearce & Sons (Contractors) Ltd. Consulting Engineer: H. G. Cousins, B.Sc., M.I.C.E., M.I. Struct.E.

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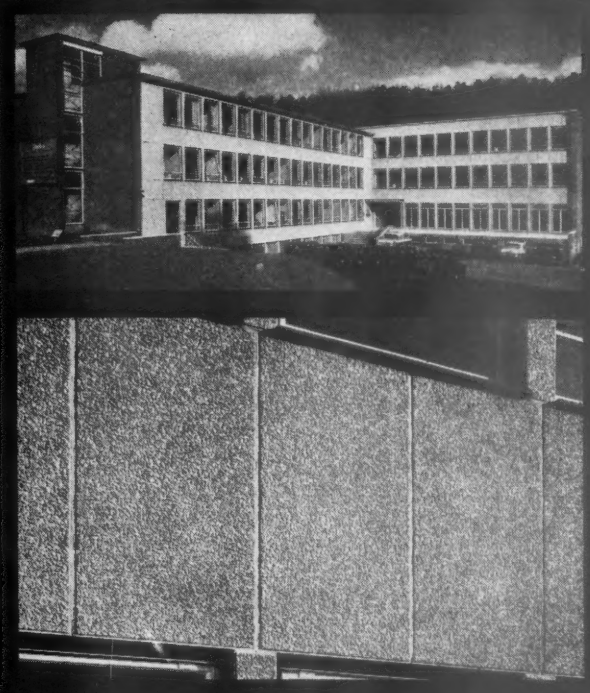

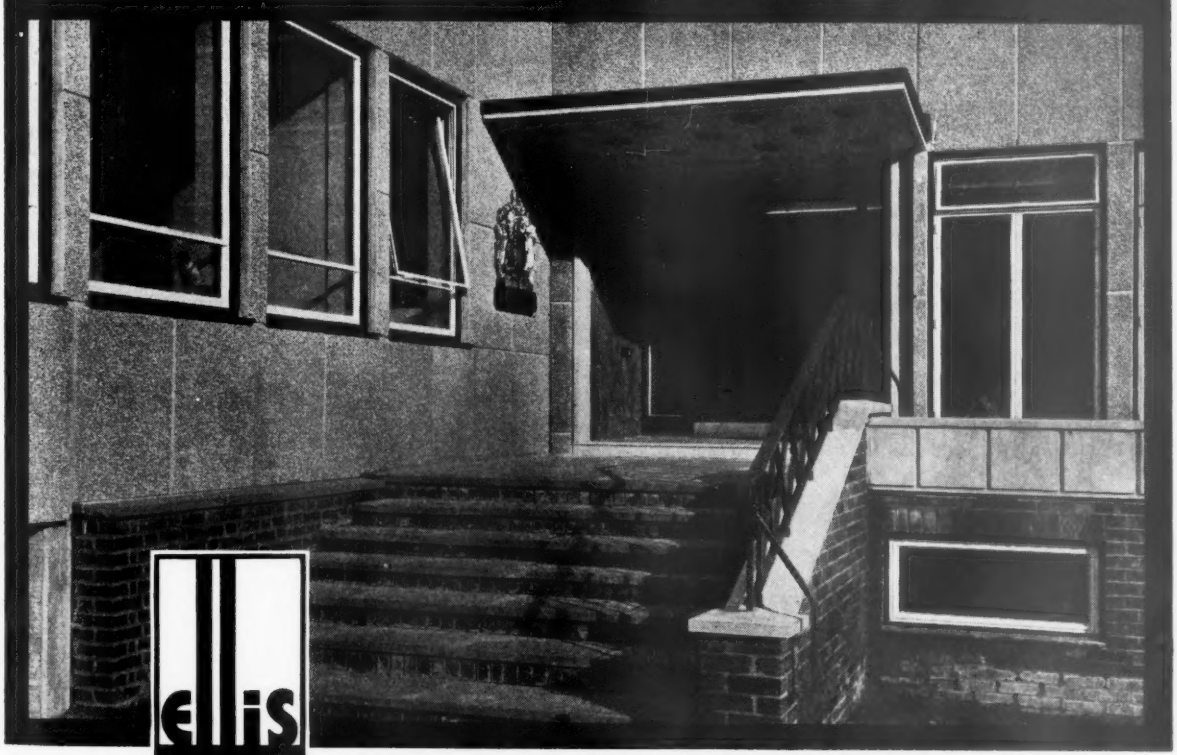

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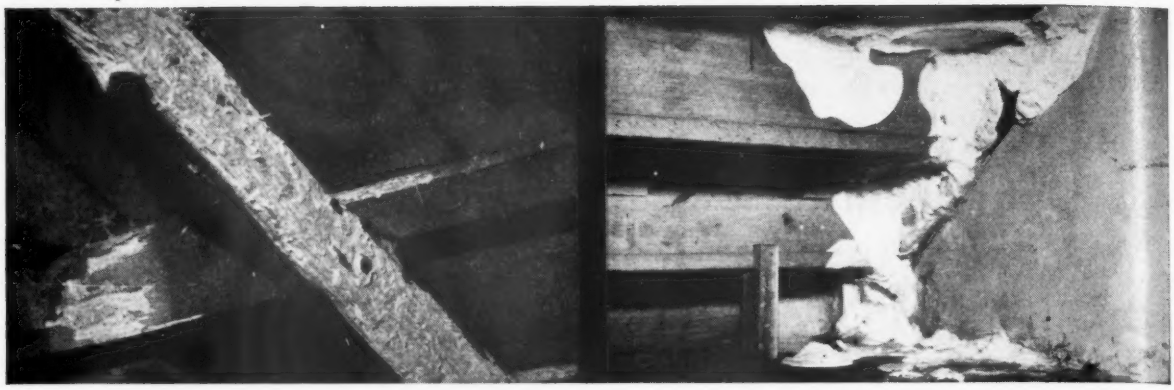

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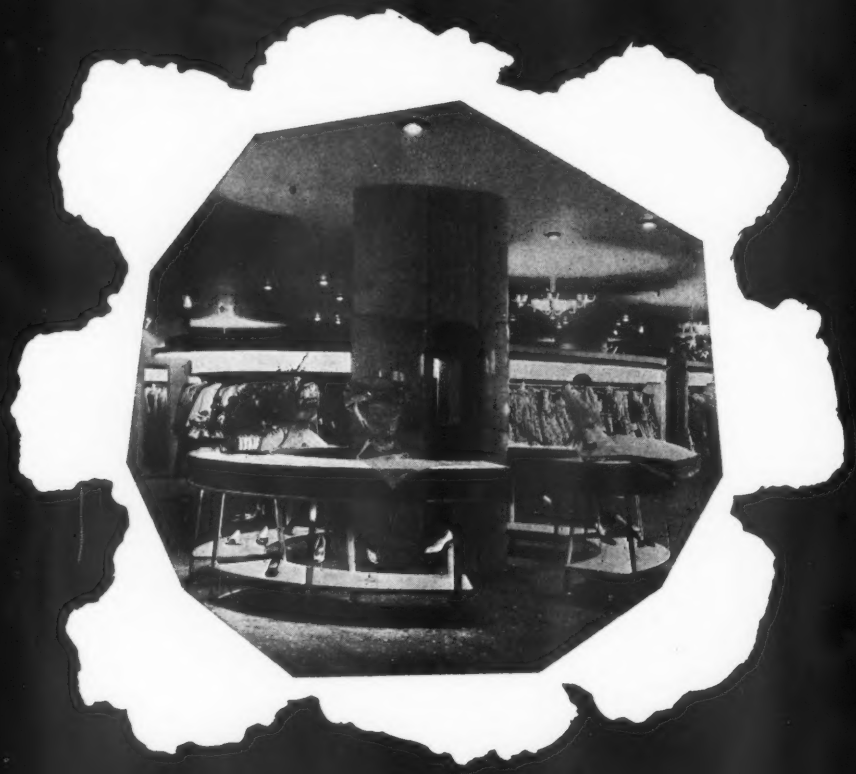

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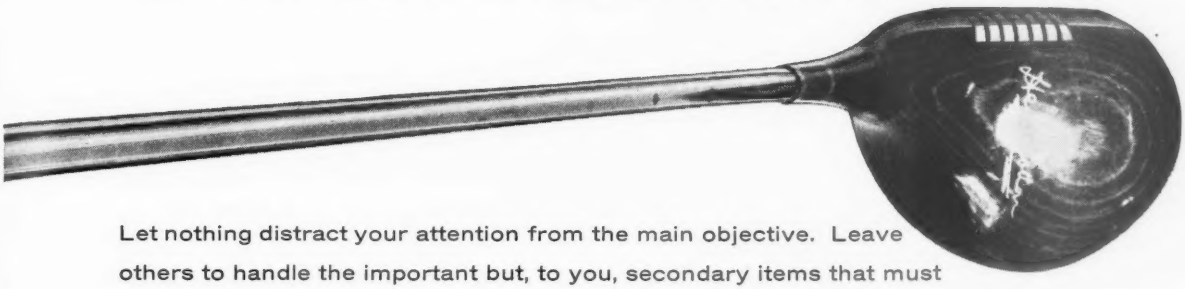

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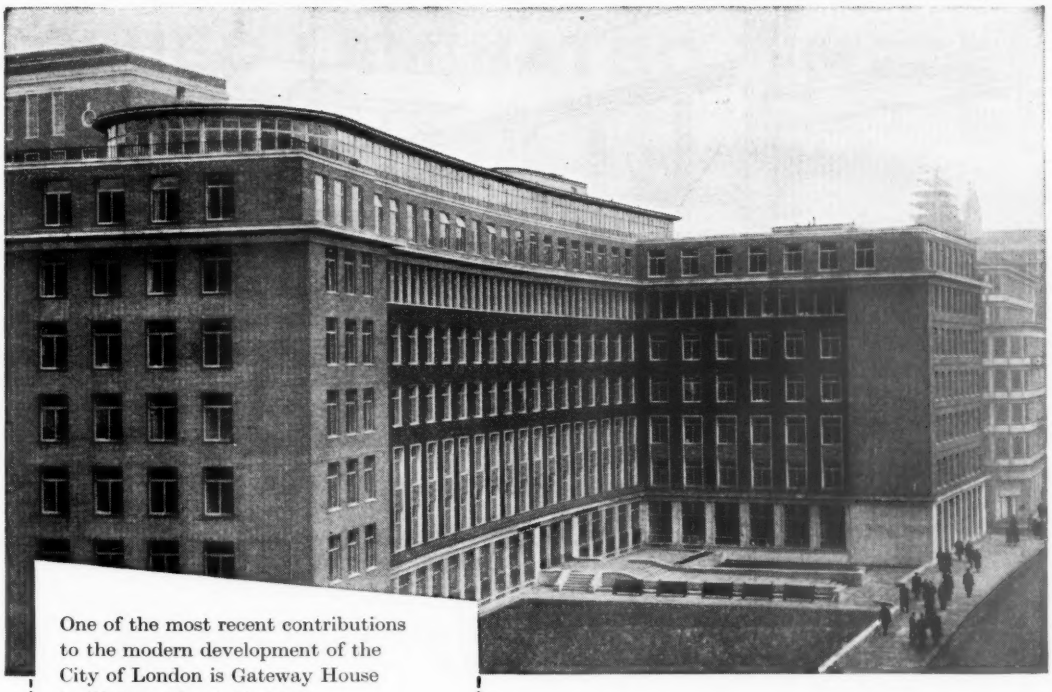

One of the most recent contributions to the modern development of the City of London is Gateway House in Watling Street, E.C.4, administration centre of The Wiggins Teape Group. Throughout this fine modern building the appointments, furnishings and equipment are of the latest design. The heating, for example, is provided almost exclusively by Crane Radiators. Of the Crane "Pall Mall" type there are forty 30″ high units and six hundred 24″ high units; of the Crane 24″ Wall Type there are sixty. Crane Radiators are made in cast iron, are efficient and dependable. As well as doing a first-class job of maintaining a comfortable temperature everywhere, harmonising unobtrusively with their surroundings, they give long, hardworking service, free of maintenance costs.

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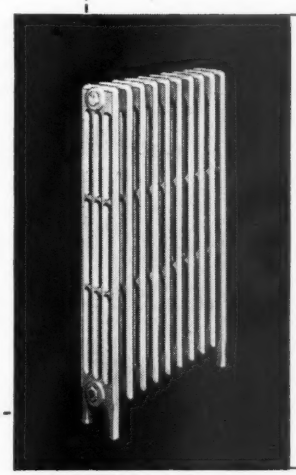

*

Above

GATEWAY HOUSE
Watling Street, London, E.C.4.

OCCUPIER
The Wiggins Teape Group

BUILDERS
Trollope & Colls Ltd., London, E.C.2.

HEATING ENGINEERS
Young, Austen & Young Ltd., London, W.C.1.

ARCHITECTS
Trehearne & Norman, Preston & Partners, London, W.C.2.

Left

The Crane "Pall Mall" 4-column cast iron radiator, $5\frac{5}{8}$″ wide.

*

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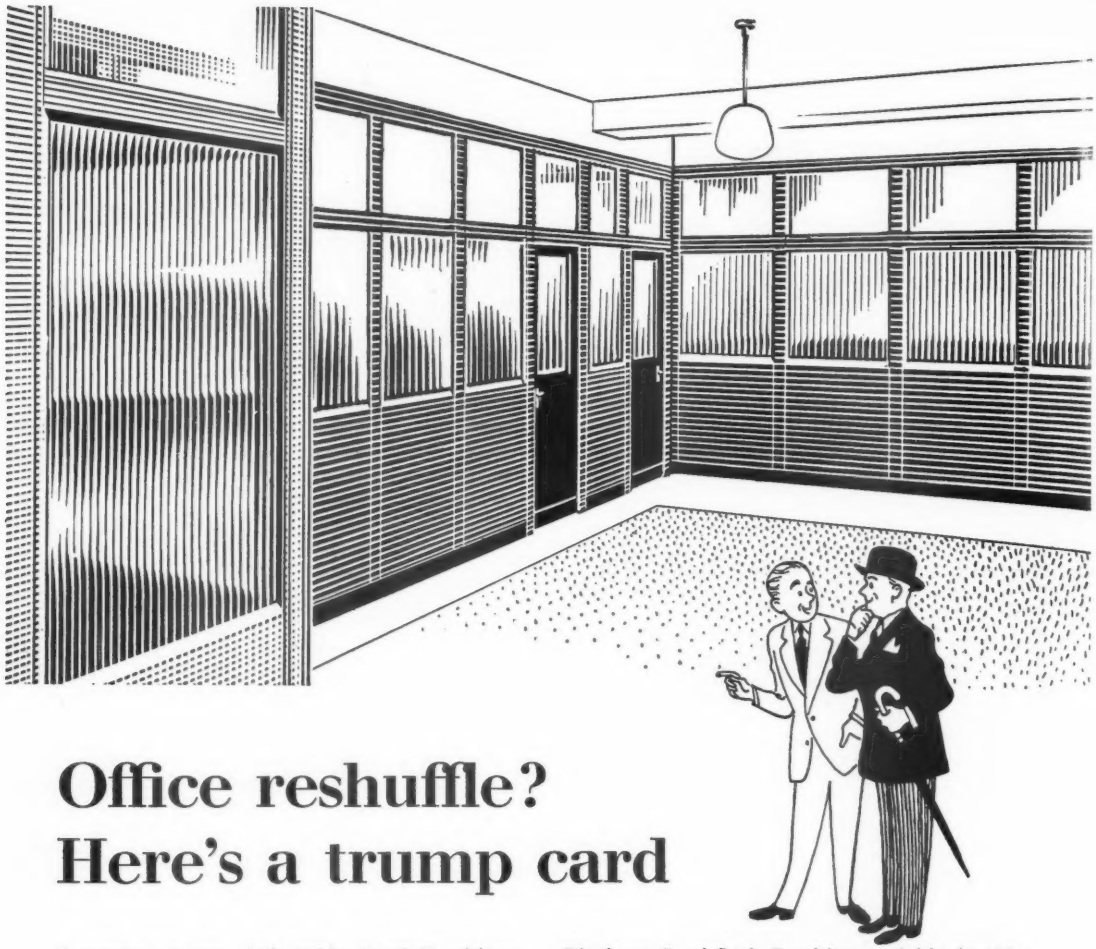

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AUGUST 1958 THIRD SERIES VOL. 65 NUMBER 10 THREE SHILLINGS AND SIXPENCE

EDITORIAL

Honours

Mr. John Murray Easton [*F*] has been elected Associate, Architectural Section, of the Royal Academy of Belgium.

Captain D. R. Duncan, O.B.E. [*A*], has been awarded the Army Emergency Reserve Decoration.

French Royal Gold Medallists

The Library Committee have been considering the past awards of the Royal Gold Medal to individual foreign architects with a view to collecting a small personal sketch or water colour drawing to add to those from British architects which are already in the Library.

The first award to a French architect, out of a total of 16, was made in 1855 and the most recent was to Le Corbusier in 1953.

Correspondence with the French Section of the International Union of Architects and with the Academy of Architecture evoked an immediate response. Our French colleagues have taken immense pains to trace the relations and acquaintances of deceased Royal Gold Medallists and to obtain a personal drawing in each case for the R.I.B.A.

One of the last engagements of Mr. Kenneth M. B. Cross before his term of office as President expired was to visit Paris on 23 June and attend a special meeting of the Academy of Architecture at which the generous gift of nine personal drawings was formally made by the President, M. F. Chevalier. The work of such illustrious architects as Viollet-le-Duc, Charles Garnier and Auguste Perret, whose widow was present at the ceremony, was included. After the formalities the proceedings terminated with a dinner in the Eiffel Tower Restaurant and a trip on the Seine in a motor launch.

Inspection of Churches Measure

The Practice Committee at the request of the Council have been considering how best the terms of engagement of architects under the Inspection of Churches Measure might be defined. Their recommendations together with a 'form of an architect's report on a church' as agreed between the Central Council for the Care of Churches and the R.I.B.A. are given on page 347.

The Rome Scholarship in Architecture 1958

The Faculty of Architecture of the British School at Rome announce the award of the Rome Scholarship for 1958 to Mr. Alfred Rigby, B.A. (Manchester).

Mr. Rigby, who is 24 years of age, is at present a Studio Assistant at Manchester University School of Architecture.

Fewer plans for new factories

The number of new factory plans approved by the Board of Trade in the first six months of 1958 showed a fall of 12 per cent compared with a year earlier, while in terms of square feet the fall was nearly 30 per cent. This decline in activity fits in with the picture shown by an inquiry made in May by the Federation of British Industries of a number of their members. Half of these reported that their capital expenditure authorisations in 1958 would be less than in 1957 compared with only 18 per cent who expected to authorise more than in 1957. It is to be hoped that the recent Government measures to encourage private investment (the lowering of Bank Rate to 5 per cent, the further increase in initial allowances on new industrial building beyond that announced in the Budget, and the relaxation of credit restrictions by banks and the Capital Issues Committee) will lead to a modification of this downward trend, although it seems unlikely that there will be any immediate upsurge of new factory plans on a large scale.

The value of new orders received by builders and civil engineers during the first quarter of 1958 was slightly higher than the amount of new work done during the quarter, but was 8 per cent less than the value of new orders in the first quarter of 1957. Orders for housing were about one quarter lower than the level of a year earlier. Most of the fall was due to the smaller building programmes of local authorities; but orders for private housing were also lower, by 13 per cent, than a year earlier, although they were above the level of completions in the first quarter of 1958. Increased orders for building (other than housing) for public authorities were mainly responsible for the overall increase compared with a year earlier; greater activity in road building was a contributory factor here.

A useful indication of the average timelag between the receipt by the architect of his first instructions to plan a

building and the actual start of building work on the ground, for different types and sizes of buildings, is given in the article on page 350, which describes the result of a recent survey made by the Institute.

Council Business

At the meeting of the Council on 8 July, the new President, Mr. Basil Spence, took the Chair.

Before proceeding to the appointment of Honorary Officers for the Session 1958–1959, the Council fully discussed the resolution passed at the Annual General Meeting which asked that steps be taken to restrict the appointments to those who had been elected as members of Council.

It was recalled that this matter had been referred to the Committee being set up to consider all aspects of the constitution and it was thought that until they had reported no radical change in principle should be made.

Under the provisions of Bye-law 28 Mr. Norman H. Fowler [*F*] as Chairman of the Allied Societies' Conference, becomes a Vice-President for the Session. Mr. A. G. Sheppard Fidler [*F*] and the Hon. Lionel Brett [*F*] were appointed Vice-Presidents, and Mr. J. H. Forshaw [*F*] was re-appointed a Vice-President for a second year of office.

Mr. Richard Sheppard [*F*] was appointed Honorary Secretary. Mr. E. D. Jefferiss Mathews [*F*] was re-appointed Honorary Treasurer.

The Council gave approval to a memorandum of evidence prepared jointly by the Town and Country Planning and Housing Committee and the Committee on By-laws and Building Regulations for submission to the Royal Commission on Local Government in Greater London.

The Council also gave approval to proposals put forward by the Cost Research Committee for holding a Conference on Cost Control at Missenden Abbey, Bucks, in January.

The Council considered a letter from Mr. J. J. Mackay-Lewis, President of the British Architectural Students' Association.

It was agreed to express sympathy with, and support for the aims and objects of the Association.

The Institute's opinion of the importance of bringing in, through the Allied Societies, those students now studying in full-time schools was also stressed.

Other notes from the Minutes are given on page 356.

Cost Control Conference

A week-end conference on methods of cost control for architects is being arranged by the Cost Research Committee of the Institute. The conference will take place at Missenden Abbey, Great Missenden, Bucks, from the evening of Thursday 15 January to Sunday 18 January 1959. The speakers will include architects, quantity surveyors and a builder. Allied Societies in broadly the south-east of England, within reach of Great Missenden, will be invited to send representatives and in addition there will be a number of places open to individual architects. Further details of the conference and advice on how applications should be made will be given in the October issue of the JOURNAL.

The Victorian Society

The Victorian Society has been formed to make sure that the best Victorian buildings and their contents do not disappear before their merits are more generally appreciated.

As a first step, £500 has to be raised to set up a secretarial organisation. If this can be done, the Society for the Protection of Ancient Buildings has agreed to take the new Society under its wing and to provide accommodation at 55 Great Ormond Street, London, W.C.1.

This will enable the work of the Victorian Society to take its place as an extension of what the S.P.A.B. has done since its foundation by William Morris.

An appeal for donations and subscriptions has been issued in the name of a provisional committee which has been formed in London and whose members are: *Chairman:* The Rt. Hon. The Viscount Esher, G.B.E. [*Hon. F*]. *Vice-Chairmen:* The Countess of Rosse, Mr. John Betjeman [*Hon. A*]. *Committee:* Sir Hugh Casson, R.D.I. [*F*], Mrs. Gay Christiansen, The Earl of Euston, Mr. Peter Floud, Mr. William Gaunt, Mr. Mark Girouard, Mr. H. S. Goodhart-Rendel, C.B.E. (Past-President, R.I.B.A.), Mr. Rupert Gunnis, Mr. Christopher Hussey, C.B.E. [*Hon. A*], Mr. Ivor Idris, Professor N. Pevsner, C.B.E. [*Hon. A*] and Mr. Carew Wallace, A.R.I.C.S.

Further details and membership subscription rates are given in a general note on page 356.

Seminar on 'Heating' for Teachers in Recognised Schools of Architecture

The R.I.B.A. is fully alive to the fact that the teaching of technical subjects in schools of architecture should be up to date.

The Institute, therefore, is sponsoring a series of advanced courses for the benefit of teachers in Recognised Schools of Architecture at which specialists in their own field will give lectures to be followed by general discussion.

The first of such seminars will be on 'Heating'. Mr. A. Douglas Jones [*F*] has arranged for this course to be held at the Birmingham School of Architecture, of which he is the Head, on 22–24 October 1958. The lecturers will include Mr. J. B. Dick (Building Research Station); Mr. W. A. Allen [*A*] (Chief Architect, B.R.S.); Mr. L. J. Fowler (Head of Weatherfoil); Mr. K. Allerton [*A*] (County Architect's Department Nottingham); and Mr. J. Bickerdike [*A*].

It is thought best to keep numbers down to allow for close discussion and therefore only one staff member from each of the Recognised Schools is being invited to attend.

A.A. School's Course in Tropical Architecture

The A.A. School's Department of Tropical Architecture has arranged a course in tropical architecture for post-graduate students of architecture and qualified architects with interests in building in the tropics for the session 6 October 1958 to 27 March 1959. The course also includes lectures by specialists on specific aspects of tropical architecture, housing and planning which will be open to architects and others not attending the full-time course. Further details are given in a general note on page 356.

R.I.B.A. Diary

FRIDAY 1 AUGUST–SATURDAY 30 AUGUST inclusive. R.I.B.A. Reference Library closed. Loan Library open 12 noon–2 p.m. Saturdays 12 noon–1 p.m.

SATURDAY 2 AUGUST–MONDAY 4 AUGUST inclusive. R.I.B.A. offices and library closed for August holiday.

MONDAY 4 AUGUST–TUESDAY 26 AUGUST inclusive. R.I.B.A. canteen closed.

The Problem of Technical Information

By Eric L. Bird, M.B.E., M.C. [*A*]

Technical Research and Education Officer, The Building Centre

Given at the R.I.B.A. on 17 June. The President, Mr. Kenneth M. B. Cross, in the Chair

BEFORE 1914 there was no problem of information in the building industry. In the matter of building techniques a few well-thumbed construction books, such as Mitchell, or Jaggard and Drury, plus the experience of the head draughtsman or foreman, sufficed with what were still mainly traditional methods of building. The infrequent new materials were produced by the commercial traveller, or seen at the biennial visit to the Building Trades Exhibition. Most planning requirements were to be found in established textbooks, such as Felix Clay on schools, and Cross on swimming baths. As for economy in structure and planning, nobody bothered much about that when building costs were one shilling or so per cubic foot. Those halcyon days, which I recollect from my time as a junior in an architect's office, are now no more than a pleasant memory.

The strikingly contrasting position of today hardly needs describing; it is all too familiar. New techniques clamour continuously for our attention. The Building Research Station, with its split personality, tries hard to establish some fixed landmarks for our guidance in the fog of new techniques while performing its primary function of adding energetically to that fog. As for new building products, in the past six months the Building Centre has noted one hundred and eleven, or five every week. New types of building, involving elaborate studies of planning and structural requirements, are being increasingly demanded by the building public. Old types of building are undergoing meticulous re-examination; for example, the Ministry of Education, in changing from a restrictive body to a propulsive one, has revolutionised school building: in hospital design, the Nuffield Trust has finally shaken off the mantle of Florence Nightingale.

How are the workaday practitioners in building—that is to say, the architects, surveyors and builders—keeping up in this technological race? The short answer is 'they are not'. Some adhere to the old well-tried methods with ever-diminishing hope of getting them well executed and at reasonable cost; others grasp at new ideas, new methods or new materials, often to find subsequently that performance falls short of promise, or that new methods and materials are haunted by unanticipated gremlins.

The reason for this present state of affairs is that none of us has enough time to read. Even those, like myself, whose job it is to keep abreast of developments, can do no more than skim odd bits of information off the vast stream of reading matter as it flows by. We cannot get into or keep in our heads more than a small amount of it.

It is now clear that if the individual practitioner as the unit and the industry as a whole are to have at command the best and latest information of all kinds relating to building, some kind of concerted co-operative effort must be substituted for individual sporadic scramblings. Information must be so collected and classified that finding and using it is both easy and quick. This is no simple task.

The practitioner is the man who matters—the qualified man at his desk or on the job. Any co-operative system must therefore have as its basic aim that of providing the practitioner with an answer, or set of answers, to a problem, or set of problems, as soon as possible after he is confronted with it. And those answers must be in a form which he can both understand and use. The form and mechanism of any information service is entirely subsidiary to these twin aims. Any system of bibliographies, classification or *documentation*—call it what you will—which fails in some measure to meet fully those aims, fails in its effectiveness.

There is no simple solution to what is a complex of problems. Many people are working on sections of it. But I believe that the building industry as a whole ought to examine the problem in toto and attempt to organise it, so that the well-intentioned efforts of persons and bodies shall operate with a common purpose in an agreed system towards the basic aims I have defined. If this is not done, the situation will become progressively more confused and the industry, as it were, drag its technological feet to an ever greater extent, because nothing will stop the scientists and engineers—and indeed, the architects—from producing more and more ideas, techniques and new building materials.

My main purpose in this paper is to examine the overall problem of information and suggest some methods by which co-ordinated effort can be achieved. For this I shall first look at some items in isolation.

EDUCATION

While I believe that one begins to learn about building when one becomes a student or apprentice and ceases to learn only when in the grave, crematorium or A.B.S. Homes, I shall not discuss the specialised problems of education up to the stage of qualification. These problems are the urgent concern of those who know far more about them than I do. They have been discussed recently at a high-level conference organised by the R.I.B.A.

On the question of student education I would only offer the opinion that a knowledge of science in the entrant to the building industry is becoming increasingly desirable if he is to grasp readily the newer techniques, and be able to assess the performances of materials and structural forms. He needs to know the language of science and to have something of a scientific outlook.

As for post-graduate education, most of us learn as we go along, partly by occasional reading, but mostly by trial and error or success. There is, however, a growing realisation of the need for short post-graduate courses and some have been or are in process of being organised. Having seen such courses in operation at the York Institute of Architectural Study, I am strongly convinced of their usefulness. I am informed that the organisation of post-graduate courses is one of the chief functions of the recently-formed Yerbury Foundation.

While it is hard to draw a dividing line between education and an information service, I am limiting this paper to the needs of the man at his desk or on the job.

SCOPE OF DEMAND FOR INFORMATION

Those architects who have given thought to the problem of information not unnaturally regard it mainly in terms of their own needs. In the Building Centre, where we receive some 120,000 inquiries a year, we find, roughly, that about 35 per cent come from architects, 15 per cent from surveyors, 25 per cent from builders and builders' merchants, 5 per cent from Government departments and the offices of nationalised industries, and 20 per cent from the public and Press.

Within the industry and within sections of the industry, the pattern of demand for information is widely varied. For example, some architects are concerned solely with special kinds of new building; other architects and some surveyors with the maintenance of old buildings; builders want information on methods and plant; quantity surveyors on costs. At one time or another, any single person seems to require information in most of the different branches. Therefore, I suggest that any information service, or any classification system devised for such a service, should cover the needs of the industry as a whole.

I am not suggesting that all this information can, or should come from a single source; indeed, I think such an idea to be impracticable; but I do wish to emphasise

here the enormous range of information and the variety of demand for it.

A SINGLE SOURCE OF INFORMATION?

That there should be a single source of information for the whole industry is an idea that commends itself to the tidy minds of architects. It has already been considered. In 1934, I attended in the R.I.B.A. a series of meetings of representatives of all sections of the industry under the Chairmanship of Sir Raymond Unwin, to consider the setting up of such a single 'umbrella' information service. The proposal died a natural death when some of the harder-headed business men present calculated that, to be effective over the whole country and in the whole industry, such a service would then cost at least £100,000 a year to run. The idea was not the mere provision of what has become known as *documentation*, which we already have in various forms and about which I shall speak, but a service staffed with competent, and therefore highly paid, technical officers, located in a series of regional offices, who would be aware of all the sources of information and what they produce and who could collect, organise and interpret it, in readily usable form. I feel that such a service is likely to remain a dream.

PRESENT SOURCES OF INFORMATION

Sir Raymond Unwin's committee listed the then existing sources of information to the practitioner and discovered that they numbered more than one thousand. Today there are probably more. Here are some of the principal groups:—

The Department of Scientific and Industrial Research. The four sections of D.S.I.R. most concerned with building are the Building Research Station, Forest Products Research Laboratory, Joint Fire Research Organisation and Fuel Research Station. The contributions of others, such as the National Physical Laboratory, are mostly canalised through B.R.S. which is the only one dealing exclusively with building.

There are also 41 industrial research organisations which are recognised and grant-aided by D.S.I.R. Providing information on building are the research associations concerned with cast iron, ceramics, coal, coke, electricity, iron and steel, non-ferrous metals, paint, rubber and welding. Again, much of this work is canalised through B.R.S.

Other Government Departments. These include the Ministry of Works, Ministry of Housing and Local Government, Ministry of Education, Ministry of Health, Ministry of Agriculture and Fisheries (farm buildings), and the Royal Botanical Gardens at Kew (planting).

Professional and Industrial Societies. The R.I.B.A. and the R.I.C.S. advise their members on professional practice and operate library services. Members of the R.I.B.A. are familiar with their library, but I suggest that many of them have little grasp of the scale of its operations; for example, that it makes an average of 15,000 loans a year.

The National Federation of Building Trades Employers provides advice on contract procedure for its members, represents them on wages and working conditions on the National Joint Council for the Building Industry and is the authority on the statistics of building. It also operates the Building Advisory Service in which its member firms are advised, for a fee, on the organisation of their businesses. I understand this service is proving very successful. As part of the same service, courses on such matters as cost, accounting and work study, are run for the personnel of member firms. These courses, I am informed, are open to architects.

In addition to these key organisations there are several dozen societies, institutions and propagandist bodies which provide information by means of periodicals, pamphlets, lectures or individual advice on various specialised items. I select a few at random: The Town Planning Institute, The Institute of Landscape Architects, The Architectural Association, The Institution of Structural Engineers, The Institute of Builders, The Housing Centre, the Society for the Protection of Ancient Buildings, The Central Council for the Care of Churches, The Nuffield Trust, The Royal Society for the Promotion of Health, The Rural Industries Bureau and the Fire Protection Association.

The Trade Development Associations. The aim of these is primarily propagandist for a particular material, but many wisely take the view that the best form of propaganda is to ensure that their materials are rightly used; for this they have set up technical information services and in some cases research laboratories. The principal ones are the Cement and Concrete Association, the Timber Development Association, Coal Utilisation Council, Gas Council, Electrical Development Association and the associations concerned with copper, lead, zinc and aluminium. These perform a valuable service. It would be to the advantage of other associations of manufacturers, as well as of the building industry, if they followed this excellent example. To be really useful, such advisory bodies must be staffed by competent technical officers, as are those I have mentioned by name; they must not be a mere form of advertising.

The British Standards Institution. I need do no more than mention British Standards and Codes of Practice, because they have become an information service to the industry which is now recognised as indispensable. The work of the B.S.I. is really a co-operative effort by the industry itself because the Standards and Codes are prepared by committees of specialists drawn from appropriate sections.

The Building Centre. The information service of the Building Centre is the largest in any industry in the country. It is not, as some people imagine, limited to the products of exhibitors, though naturally copies of the leaflets of manufacturers who are not exhibitors cannot be sent to inquirers for the simple reason that the Building Centre has not got them. However, some 2,000 manufacturers are represented in single or group exhibits. Most of the inquiries are about materials and equipment, but a great many are on building techniques. Some of these latter can be answered by giving the inquirer a pamphlet, such as the appropriate B.R.S. *Digest*; others are transferred to the body most likely to provide an answer and in this, the Building Centre is content to act as a post office. Often, an answer concerned with a technique is obtained by the Building Centre staff telephoning an individual specialist in a Government department, professional society, trade association or commercial concern. The Scottish Building Centre and the Bristol Building Centre are independent organisations, but all three bodies work in close and friendly co-operation.

Trade Periodicals. The building industry is remarkably well served by its trade Press. Unlike many other specialist Press groups, it is almost entirely free from what might be termed 'advertisers' bias'. Its technical articles, illustration of current buildings, news of legal changes, costs, etc., and its advertisements, provide a continuous supply of information to the practitioner.

There are, however, several hundred periodicals which provide information on one or another item which is useful to the practitioner, but few practitioners take more than half a dozen periodicals in their offices, though I know one architect's office which takes thirty-three. An example of the kind of useful article which is liable to bypass the architect is a recent one on electrical floor heating in an electrical periodical which was a thorough statement on this important new technique. These articles may be listed in bibliographies, but I suggest they rarely reach the man who wants to specify or install the matters they cover. I discuss bibliographies later in this paper.

Exhibitions. The Building Exhibition has long been an important source of information on materials and techniques, though today its mere size makes a single visit inadequate and rather wearisome. To get the best out of it an individual needs to study one of the guides issued by the technical Press and firmly visit those stands which look most promising. The random visitor is liable to miss a great deal. The Building Plant Exhibitions organised by the Ministry of Works deal with a field of information which is only partly covered by the Building Exhibition at Olympia.

Annual Textbooks. Mention should be made of annual publications, such as *Specification* and the price books. The idea of the reference book which is revised periodically is one which might be extended

to other fields. In passing, I recommend it to the B.R.S.

Trade Literature. This term is today used for the heterogeneous collection of catalogues, pamphlets and leaflets issued by manufacturers and hopefully sent by them through the post or made available at exhibitions and at the Building Centre. I have a great deal to say on this matter in this paper, but here merely note that many builders' merchants' catalogues are excellent productions and much used in the offices of architects and builders, especially in the provinces.

Many practitioners have but the vaguest notion of the existence of these hundreds of sources of information and what they provide. There is quite an art in finding and using correctly the appropriate source for a particular inquiry, an art which the inquiry staff at the Building Centre have taken several years to master. The extent of this vagueness among inquirers is shown by the appreciable number of inquiries received by various information services, which should rightly be sent to another. For example, B.R.S. receives inquiries on trade products and the Building Centre on techniques which require a scientific answer.

I do not pretend that the list of sources I have given is at all complete. I hereby offer a general apology for errors of omission and incorrect nomenclature and for failing to mention many of the services performed by these and other bodies.

CLASSES OF INFORMATION

Let us now look from a different viewpoint at the information provided by the sources I have listed, namely that of broad classification. There are, I think, five main groupings, namely (1) User, (2) Techniques and Methods, (3) Materials and Equipment, (4) Costs and (5) Legal Requirements. Though there is some overlapping, each of these calls for a different approach and a different type of organisation. I will now discuss these groups individually.

User Requirements. These, which are peculiar to the architect, should be considered from the viewpoint of the man who is designing a type of building with which he is unfamiliar. He needs to be provided with a complete dossier of information on space requirements, planning arrangements, appropriate structural forms, specialised equipment and basic economic factors, together with some examples for study.

This sounds rather idealistic but is not, I think, beyond achievement if the architectural profession gets down to the job of organisation. It also sounds like the synopsis of a book, but today publishers are disinclined to publish specialist books with limited sales and, with many types of building, development is so rapid that books become quickly out of date. The kind of dossier to which I refer would need to be frequently revised in order to be up to date.

The R.I.B.A. Library produces excellent special bibliographies on types of building. These have a defect in being largely non-selective and moreover, the task of absorbing the meat from them involves a lengthy stay in the library and laborious working through of as many as a hundred references, which is difficult, if not impossible for the provincial architect. I am not decrying the excellent work of the library staff in producing these bibliographies; they are the necessary first stage in the compilation of a dossier which each architect is now expected to produce for himself, and which I am here suggesting might be a collective service. What is wanted is that each bibliography should be tackled by a competent architect who can boil out the essential facts from the mass of verbiage which a bibliography represents, and present them in a standardised format. These dossiers should be printed or photocopied, and made available to architects, who may wish to have them on their desks for many weeks.

The R.I.B.A. Professional Text and Reference Books Committee are active on this matter of user studies and the Council have agreed a provisional programme put up by the Committee. It is my personal opinion that a full service of user studies would be ultimately beyond the capacity of an R.I.B.A. Committee in requiring the paid services of staff or specialists, though this is no reason why the Committee should not make a start, as they have done. Other bodies which are concerned with specific types of building might be encouraged to co-operate. One body, the Ministry of Education, already produces an excellent series of user studies on school buildings in its Bulletins.

Techniques and Methods. Techniques include such things as acoustics, lighting, comfort conditions, insulation, insolation, structures and services. Some of these, like acoustics, are more or less established and can be covered by books. But in many others there is continuous development. At present this newer information must be searched for in D.S.I.R. publications, Codes of Practice, and articles by specialists in periodicals.

Methods include site organisation, management and the economics of equipment such as tower cranes, rising formwork, precasting and types of prefabrication. Information on these is even more dispersed and hard to find than that on techniques.

Here again, there is continuous development and some sort of compiled dossier seems desirable. Lists of references and abstracts, such as the Building Science Abstracts, issued by B.R.S. have, like the R.I.B.A. Library bibliographies, but limited use, because they involve excessive labour on the part of the inquirer. Unlike user studies, questions of techniques and methods are the concern of the whole industry.

Materials and Equipment. The practitioner can obtain information on materials and equipment much more easily than on user requirements and techniques, and the volume of demand is very much greater. This is the special province of the Building Centre, and of the Scottish Building Centre and the Bristol Building Centre. There are also the trade product cataloguing and filing systems such as the Architects Standard Catalogues, Classifile and Specifile. Moreover, the manufacturers are only too keen to acquaint practitioners with their products.

A primary need in this group is standardisation of trade literature, mainly in size, but also in format. The Competition for Manufacturers' Trade and Technical Literature, held last year jointly by the R.I.B.A. and the Building Centre, and being repeated this year, is undoubtedly a move towards this desirable end. It has revealed that many manufacturers were quite unaware of the need for standardisation, or indeed, of the existence of B.S. 1311, and some still are. Nor do many of them realise the extent to which the architect is irritated by confusion of technical information and sales promotion advertising in the same item of literature. If they can be persuaded to separate the two into (*a*) technical information leaflets, of standard size, to be filed for reference, and (*b*) a sales promotion leaflet to be looked at and discarded, they will be conferring a boon on the architects and builders who specify and purchase their products, and indirectly on themselves. In this country we have a long way to go before we reach the position of the United States building industry with its Sweett's Catalogue.

It is not, I think, within the province of an information service on materials and equipment to influence in any way the choice of the practitioner. It is a firm rule in the Building Centre that the staff shall not recommend one item as against another. By doing so the officer concerned would be assuming some degree of responsibility for an item over whose manufacture, installation and conditions of service he can have no control. The same applies, I think, to any body which sets out to approve materials or items of equipment in respect of performance except where, as in the case of solid fuel and gas appliances, there are research organisations equipped and staffed to conduct full trials. Otherwise, responsibility for selection must rest with the architect, surveyor or builder. However, the American Institute of Architects are now studying the question of issuing trade products with some kind of approval certificate. This is a bold venture which we should watch, though I think the U.S. libel laws are far less menacing than ours. Also, we have this matter to some extent covered by the British Standards Institution whose scope is much greater than that of the U.S. Bureau of Standards.

A great deal of useful information on materials and equipment emanates from the various sections of D.S.I.R., in particular from B.R.S.; this information mostly covers performance. It suffers from the great handicap that a Government body cannot mention trade products by name,

whereas the building industry tends to think in trade names rather than in generic terms. Plasters are an instance of this, the practitioner finding difficulty in relating the terms used in B.R.S. publications on this subject to the brands of plaster with which he is familiar. It is unlikely that a Government research body will embark on the perilous course of discussing trade products by name, but a move towards circumventing this difficulty has just been started by the B.R.S., who are beginning to state in some of their publications that the names of the makers of the products discussed can be obtained from the Building Centre.

Costs. Costs are as yet hardly amenable to handling by an information service. What might be called day-to-day costs of materials and labour are handled very well by the price books, such as Laxton's and Spon's, and by regular publication in the weekly trade periodicals.

The subject of cost analyses is rather outside the scope of this paper, but I note that there is nothing like unanimity of opinion among architects and quantity surveyors, on both the machinery for compiling them and their value when compiled.

Nevertheless, the more the industry, in particular its architectural section, can become cost-conscious, the better for both the industry and the building public; I think that is generally agreed. All I am concerned with here is with pointing out that this is a fruitful field for a co-operative information service, but one that is difficult to cultivate.

Legal Requirements. Included in this group are contract administration, relevant Acts of Parliament and the regulations of Government departments, the by-laws of local authorities and case law.

In contract administration there is a shining example of co-operation between the various sections of the industry in the Joint Tribunal on the Standard Form of Contract. This body, without whose labours contract administration would be chaotic, runs its own information service in the form of revised editions of the R.I.B.A. Form of Contract, and sees that each revision, as it is made, is issued to the technical Press.

There is no kind of information service on the multifarious requirements of Government departments and local authorities, though books by legally-qualified authors, Practice Notes in the R.I.B.A. JOURNAL, and similar notes in other periodicals do serve to keep the practitioner to some extent informed.

As regards local authority by-laws, the general adoption of the Model Building By-laws of the Ministry of Housing and Local Government and of the Department of Health for Scotland has done much to ease the life of the practitioner, though there are still some authorities, notably the London County Council, who have individual requirements. There is no such codification in the requirements of many public service bodies, notably the water undertakings.

In addition, there are numerous Acts of Parliament and regulations made under them which control building and which are administered by different Government departments. The Ministry of Housing and Local Government, for example, establishes housing standards, and deals with slum clearance, as well as some other matters. The Ministry of Education sets standards of school accommodation. The Ministry of Health covers hospital requirements through the Hospital Boards. The Home Office controls safety requirements. The Ministry of Labour and National Service administers the Factories Act. A recent newcomer is the Ministry of Power, which has had thrust upon it the question of factory insulation. Fortunately, at the moment, we are free of the Ministry of Works on licensing.

On all these matters the individual practitioner can obtain copies of the relevant Acts and Regulations from H.M. Stationery Office, or, in the case of public service authorities, from the individual authorities. But there is no central co-operative organisation which watches these requirements on behalf of the individual practitioner and issues information on them. I am informed by architects who have had to design an unfamiliar type of building in an unfamiliar region, that the time taken in collecting all the relevant legal data can be very great.

CO-OPERATIVE EFFORT VERSUS INDIVIDUAL EFFORT

I hope I have made clear in the foregoing outline that the information which is available to the industry is enormous in amount and coverage, that the demand for it is large and wide-ranging and that much of it is not used because it is unorganised, unpublicised and hard to find.

Hitherto, we have been accustomed to approaching this matter on an individualistic basis, being hardly conscious of the vast aggregate waste and duplication of effort by the industry thus involved. I think the time has come when the various sections of the industry, either collectively or individually as is appropriate, might well consider organising co-operative effort on a much greater scale than in the past, in much the same way as it has done in the British Standards Institution and the Joint Tribunal on the Standard Form of Contract.

Some of the larger offices of architects, surveyors and builders have already established for themselves small-scale information services covering some or all of the groups of subjects I have described. I visited and studied one such recently and I was impressed with its efficiency and usefulness. But such a service is beyond the financial capacity of the smaller architect, surveyor and builder. He it is who is most liable to drag his technological feet or to fall into unperceived legal pitfalls, and who would benefit most from a better information service, though all the units in the industry, large as well as small, would benefit.

EXTENDING STANDARDISATION

There are some indispensable first steps. I have already mentioned the standardisation of trade literature. Could standardisation of size not be extended to all the pamphlets and leaflets issued by Government departments and other bodies? The British Standards Institution are proposing to do this with their publications and papers, and they, above everyone else, ought to set an example. The German and Scandinavian countries have not only done so, but have also extended standardisation of size to office notepaper. In Scandinavia standardisation of size is now complete in all publications dealing with building, including periodicals. One of the handicaps to efficient filing of articles cut from British periodicals is their variation in page size. This is something the publishers of trade periodicals might consider, though doubtless they will dislike the idea. A little pressure from the industry might help.

CLASSIFICATION SYSTEMS

Since 1920 the American Institute of Architects have had a standard filing system, which to quote its sub-title, is 'For filing information on the materials, appliances and equipment employed in construction and related activities'. We in this country have available several classification systems and indexes, all doubtless serviceable and compiled with great labour. If we had a single, complete, authoritative system, as have the Americans, extended to cover the five groups of information I have outlined, we should have at least a basis for creating order in the present disorder. If such a system were established, the producers of all technical literature could *print* the appropriate reference number on each pamphlet, trade information sheet or technical article, reducing filing to the simplest operation. It may be that two systems are needed, one for trade literature and one for technical publications and books.

I shall not say more on this subject because it has been thoroughly studied by Mr. Dargan Bullivant, who succeeded the late Michael Ventris as A.J. Research Fellow for 1957. Mr. Bullivant has kindly let me see a copy of his report which is to be published by the ARCHITECTS' JOURNAL. He makes clear that it is a highly technical matter and one not to be rushed at. Not the least important problem is the devising of a system which the ordinary filing clerk can use and which does not call for skill in librarianship.

DOCUMENTATION

Earlier in this paper I said that the basic aim must be to provide the practitioner with an answer or set of answers in readily usable form. In recent years there has grown up a vast international study of what is known as documentation, with

committees to co-ordinate it. I ask one question about it. How far does it fulfil my stated basic aim of providing the practitioner with an answer or set of answers in readily usable form? I am afraid that so far it has not, though it may have proved very useful to librarians to find their way about the mass of printed matter with which they have to deal. To me, it seems at present to do little more than provide super-bibliographies.

In all this business of information there is great danger that the needs of the practitioner in building, who usually wants a simple answer to what he conceives to be a simple question and who wants that answer quickly, may be overlooked in the establishment of complex machinery which is aimed at ensuring that no technical document in any European language is overlooked.

STUDY OF OFFICE FILING SYSTEMS

Study of this subject of information ought to start with the user, that is to say, in the office of the architect, surveyor and builder. He is the consumer and it is good practice to study his needs first, and then to suit the article to them, rather than the other way round. I have referred before to one efficient office information service that I have visited, and there are others. From the men and women who operate these services much useful data on demands and methods could probably be obtained. But the needs of the smaller office where a full-time information clerk cannot be afforded must not be overlooked, because those needs are the greater; the larger offices manage well enough at present.

LIMITATIONS OF AN INFORMATION SERVICE

No information service can be expected to be able to answer all the questions all the time. It cannot be omniscient. Nor is it a substitute for ignorance and technical incompetence on the part of the inquirer, though, with the somewhat average standards of technical competence prevailing at present in the industry, an information service must be to some extent educative. The true function of an information service is to act as a help to the practitioner, attempting in some measure to do for him what he has not the knowledge, skill and, above all, the time to do for himself. But no information service can or should attempt to do the practitioner's job for him. He must remain the creative designer or executant.

Nor should an information service be regarded as a useful weapon with which occasionally to beat a client, architect, surveyor or builder. All information services develop a sixth sense which causes them to take avoiding action when they suspect that an inquiry is to be so used. B.R.S. have a system for this kind of thing, which has two chief features. First, they decline to send someone to look at a failure except when they think it is likely to be of use to them in a research programme. Second, they warn the inquirer that they will seek only the facts about the failure and that their findings may prove embarrassing to him.

FORMULATING QUESTIONS

The practitioner must know or be taught to know how to formulate his requirements—how to ask a question. All information officers have abundant experience of cases where an inquirer has not thought out what he really wants to know, or in some cases, does not know. On this I quote Mr. R. C. Bevan, Chief Information Officer of the Building Research Station: 'It is often more difficult to frame an inquiry than to answer it. As much care should be given to framing a question as is expected in the answer'.

Mr. Bevan's dictum applies as much to preliminary inquiries about the requirements of a forthcoming project as about failures. The officer trying to answer the question can hardly be told too much about the circumstances of use of the structural form, material or item of equipment under discussion. The more abundant and clear the information given, the more precise can be his reply. Efficiency in an information service is a two-way affair; the more the inquirer knows how to use it, the better it becomes.

REPORTING BACK

It is, or could be, a two-way affair in another sense. The industry tries out forms of structure and materials, but very little of the resulting experience comes back into general circulation. Few practitioners trouble to report back to an information service on how far a suggestion or item of advice has proved successful, though they may complain when it has not. Some years ago B.R.S. established a corps of honorary observers to report on failures and successes in the field, but it proved unfruitful, and was abandoned. In 1950, the Ministry of Works, established a Technical Information Service, partly to gather field experience but mainly to advise architects and builders on technical aspects of new projects and on failures. Twelve Regional Technical Information officers were appointed and much good work has been done, though recently the Treasury have been busy with an axe on this service and the regional officers are being reduced in number. I think that some kind of field service can be valuable, especially to the smaller practitioners, but who should organise it and who should pay for it is not for me to say.

TECHNICAL INTERPRETERS

It seems platitudinous to say that an officer who dispenses information on building should possess technical knowledge of building, but some do not. It is not enough for him to hand out stock answers or the leaflet he hopes will be the most appropriate. He should be, or have available, a person who can grasp and interpret the technical needs of an inquirer, which in building are not infrequently complex and abstruse.

In the Building Centre it has long been realised that the officers must to some extent be specialists in one or another branch of materials and equipment. The library of the Fuel Research Station is mainly staffed with scientists and engineers. It would, I suggest, add to the efficiency of the R.I.B.A. Library if its staff included at least one person trained as an architect and who could deal with the more complex technical inquiries. The same applies, perhaps, to other specialist libraries. This is not an unkind reflection on my friends who are expert librarians, but merely a suggestion for improving the efficiency of the service they provide.

CONCLUSION

In this rambling paper I have tried first to indicate the extent of demand for technical information of all kinds. Secondly, I have attempted to show in outline how much information is available and of what types. Thirdly, I have suggested that the industry ought to tackle the total problem in a realistic way. Fourthly, I have added a few random thoughts on some details.

I have not examined more than superficially the methods by which a better information service or services might be established. Much labour and thought still needs to be expended on this. Certainly I do not suggest the setting up of some super-organisation by the industry. But, as a first step, an *ad-hoc* committee representing the whole industry might agree a single authoritative standard index system. Thereafter pressure by the representative institutions of the industry aimed at getting all producers of the technical, periodical and trade literature which it uses to adopt B.S. 1311 standard size should be relentlessly maintained. Otherwise, improvement should be sought mainly in the existing services, for which I have made a few suggestions, with the addition of user-requirement dossiers by the R.I.B.A. and perhaps eventually joint action with other bodies regarding costs and legal requirements.

VOTE OF THANKS

Mr. W. A. Allen, Chief Architect, Building Research Station: Much of Mr. Bird's life in the past twenty years has prepared him for this past hour in which he has done so much to clarify and bring into focus a serious problem which faces us as a profession.

We must, Sir, always today have in our minds the fact that membership now of a profession is not merely a question of personal usefulness or pleasure, but a responsibility in society, frequently confirmed in law. Similarly, a professional organisation has to have a high sense of responsibility and a high level of effectiveness or some sort of action may be taken by society to ensure that it is properly served some other way. What was once voluntary is so in little more than name now; in fact, the senior professions are a concern of society and government.

I say this in order to emphasise the perspective in which I think we should see and discuss this paper. A profession must be knowledgeable, and it must gather and distribute knowledge continually and effectively if it is to meet its commitments. Otherwise it falls below its potential level of working and lays itself open to justified criticism.

In this context, Sir, may I make one or two observations?

I think we should look afresh at our organisation for this activity within the Institute. We hold far more, far bigger and often much better meetings than we did ten years ago. But our publication position for the results is not, in my view, now in line with what is called for today. I think we need a house journal, and I think we should handle our information side separately. I deplore the multiplying of architectural journals which we see in Britain today, good and well-intentioned as they are, because they disperse and confuse our network for spreading information. They are doing a job part of which we should be doing. I think they absorb a great deal of the energy which might be directed more effectively into more centralised and more effective channels of communication.

But I am not thinking only of articles; much detailed information and experience which we as professional people gather in the ordinary course of work should be flowing through our network in a systematic way. We must see that we learn quickly and collectively from our own experience. Your Science Committee and your Textbooks Committee, as Mr. Bird said, are both developing proposals for this general purpose. In this respect, I hope you will ask Mr. Dargan Bullivant to speak in the discussion for he has done a great deal for us in this field during the past eighteen months.

Mr. Bird speaks of classification, and I think we ought to discuss this particularly perhaps. One of the great achievements of the American Institute was a successful classification for architects about thirty or thirty-five years ago, as Mr. Bird said. But we must see that we are not misled by complex systems, borrowed perhaps from fields of science or technology.

As Eric Bird said, architects have their own problem in the development of an initial design concept, its working up, and the selection of actual products. I am sure we should arrange our classification to meet the day-to-day needs of people at work in offices. I support wholeheartedly Mr. Bird's suggestion of a committee with the building industry to see that between us we get what we need for these two related activities.

This serving of the man in the office must be one of our primary functions in the Institute, and I think we should perhaps look at one or two other parts of our Institute's mechanism from this point of view.

As Mr. Bird hinted, and I join him in all he says about it, our library has a splendid staff and service. I served on the Library Committee for something like ten years and I have great admiration for their work. But like so many libraries, it is perhaps biased a little too much towards research and study and too little towards the need of the man at a drawing board. It was natural to be so but it need not be sacrosanct.

One separate and specific point is the size and format of trade and technical literature. We have made a start, as Mr. Bird says, and he has added horse power to our effort. We ought to support this revolt against the wholly regrettable display of personal prejudice on the size of trade and technical literature which flows into our offices.

But one could go on about all these matters for a long time. They are so interesting. I must give place to others, while expressing my thanks to you for allowing me to propose a vote of thanks to Mr. Bird, which I now most wholeheartedly do.

Mr. David Woodbine Parish, F.I.O.B., Junior Vice-President, National Federation of Building Trades Employers: First, may I thank you for the compliment you have paid me in inviting me to second this motion and say how very much I have enjoyed listening to Mr. Bird's paper tonight. The detailed thought and the imagination that have gone into that paper struck me as quite remarkable.

Now I come to the matters which hit me very forcibly in the remarks with regard to the changing social, economic and industrial landscape against which we are building today. He put it very much more tidily than I can. He said we did not need very much information at the turn of the century, and today we are so overwhelmed with it that we really do not know what to do in mastering it all. And, of course, it is happening at an accelerated rate. The amount of information does not continue to increase at a steady tempo. It is accelerating all the time; and as far as I can see, it is likely to continue to do so. The reservoir of information increases and increases. The frontier of knowledge, the frontier of experience, is inevitably pushed forward each year.

With regard to information, I asked myself while I was listening to Mr. Bird what is it all aimed at? It occurs to me that the important thing for all of us to remember is that it is aimed at increased productivity. It is the social and the economic advances that are being made in this country and throughout the world that are forcing us to address so much more attention to this sort of question on information and the use to which information is put.

Listening to what was said, the 'polychotomy' of the industry struck me once again as not only being unfortunate: I wondered how much longer we need continue the sectional interests and the difference of approach to our interrelated and interdependent activities. I cannot myself believe that it is appropriate for us to consider the problem of the marshalling of information from a sectional point of view. It must be from the point of view of all those who are concerned collectively with building activity. For it is only by this means that we can make the fullest use of the information which is available to us and see that it is applied where it should be applied on building sites, aimed at putting up buildings which will suit the needs of the community which we are all in business to serve economically, not forgetting those people who are engaged in the actual production of buildings on sites.

No reference has been made at all to the individual who is at the tail end of the line of application of information, the actual craftsmen and their attendants and mechanics, and those people who are concerned with turning into three-dimensional reality the designs of the architectural profession.

I would like to support very strongly the suggestion which Mr. Bird made and which the proposer of the vote of thanks also mentioned—the need for standardisation. One of the problems of living in a democracy is that one favours a policy of freedom of action, but in this matter I think there must inevitably be, as we say in other fields, a certain giving up of sovereignty so that standardisation of practice can be achieved. I think this is something that we want to try to bring about actively by persuasion. We want to reach standardisation in many things, including the marshalling of information, so that the advantage of its use throughout the industry, not only to the architectural profession or the builders or the surveyors, but to the whole industry, is recognised. That is the aim of standardisation and codification of information.

The last point which I was interested to hear Mr. Bird raise and which I notice he failed completely to answer is who is going to pay for all this?

We are an industry concerned annually with an expenditure of £2,000 million. The waste with regard to the organisation on which we work is appalling. Five per cent of £2,000 million would more than pay for the cost of education, the cost of research, the cost of marshalling the sort of information to which Mr. Bird has referred. This could be passed on, if a cost formula could be found for passing this cost on, to the building owner. Over a period of time there would be no cost being borne by the building owner, only a very substantial saving in building costs.

I think we have to look collectively at this problem of how many things, such as joint education, research and the marshalling and codification of information, can be paid for and the cost passed on to the client. It is because of what I have referred to as the dichotomy of the industry, where we are all small units and unable to bear the cost ourselves, that we have to try to move into the field of joint endeavour where costs of this kind can be mutually borne and passed on in an intelligent way.

I have the greatest possible pleasure in seconding the vote of thanks.

The President: The vote of thanks having been moved and seconded, it is now open to any of our members and guests to take part in the discussion. To open the discussion, I should like to call upon Mr. Dargan Bullivant.

Mr. Dargan B. Bullivant [*A*]: I inherited the work that Michael Ventris did on the subject of information as the A.J. Research Fellow, and I took over from him a great legacy of work to start on. It carried me quite a long way forward. However, at various times I felt that it was almost too difficult to see the way forward. But about half-way through, it seemed to me that one way out of what was almost an impasse was to go to the smaller and more prosperous countries of Europe and see just how they managed their affairs.

It seems a little easier in a small country, where the number of organisations is smaller than we have here, and where the number of architects is smaller, to get a tidier and more efficient pattern of work.

I went to Scandinavia, and I went to Holland; and from the studies I made there I formed my conclusions on much the same lines as Mr. Bird: that we do greatly need a collaborative, concerted effort to deal with this very severe problem of information. I would agree with him over the outstanding things; and I think it is important to underline what the outstanding things are, the particular things we should study first.

I believe we should study standardisation of shape and format and this very severe question of classification. These two things, I firmly believe, could so easily revolutionise our handling of the already-existing resources of information.

There is, of course, an entirely different aspect of the problem—how to produce the information which we so badly need, apart from using what we already have. That leads one to examine the role of a professional institute in this situation, and I have found it valuable to see what is done in other industries which are technologically more advanced than the building industry.

It is not necessarily a question of our slowness, but we are behind them in the scale of evolutionary development. A particularly good example in this respect is the Institution of Electrical Engineers. It is not very much larger than our own. The membership is larger, but its total budget is not very much larger.

It operates an extremely efficient and well-organised information service which commands the admiration of the whole world. One must say immediately that the problems of electrical engineers are not those of architects nor the problems of building. We know we have difficult problems of our own. But it is interesting to look at another institute to see what can be done.

This question of the role of a professional institute might be put in another way. How should we organise ourselves to get the information we need?

The Institution of Electrical Engineers has a permanent staff who seek out, collect, sift, edit and present in a systematic, classified form, to standard sizes, a great amount of information which the profession itself produces. They spend on this very remarkable service which they produce and distribute themselves about 17 per cent of their total annual expenditure. Our expenditure on similar services is approximately 5 per cent and we get in return what 5 per cent can buy. They in return get what 17 per cent can buy. Their output of information in the form of publications —many of them showing an extremely high standard of preparation and presentation (I am not competent to judge the contents) —amounted in recent years to as many as 150 well-prepared and presented technical papers. And this is no doubt one of the reasons they stand so high in respect of the other engineering professions.

Our problems are not theirs; their problems are not ours. But it is interesting to reflect whether it should not be possible for us to undertake in some small way the same role of an institute acting as a collecting centre. We as individuals in tackling our problems can set them down. Until we set down our experience it is difficult to pass them on to others in a simple and systematic way. But we can set down what we know and ask our institute to act as a centre for collecting and distributing this information. The way the Institution of Electrical Engineers manages its affairs could give us a great deal of information and experience in this respect.

Passing to the question of standard sizes, it is important here to note the move which has recently been made by the British Standards Institution. They have announced that as from 1 March this year they are going to change over progressively to the international standard paper size known as the A series for all their papers and publications. This probably sounds very dull—more standard sizes and more in the future. But the basis of the A series is a rational one and in European countries it has enabled the architectural and other professions to get on top of the problem of varying leaflets and pamphlets of all kinds, and they don't exist any more.

The A series paper size has this particular advantage—and it is a great advantage over our traditional English sizes—that it is suitable for stationery, duplicated documents, and printed papers, so it is possible to build up files by subject, one file one subject. If you open the file, it looks like a book, not a rubbish heap, as so many of our files do.

The British Standards Institution have courageously announced their intention of following European practice, as laid down. We should examine very carefully what we can do to support the British Standards Institution as quickly as possible. I should like to propose as a first step that our own Institute should consider the gain in efficiency and the long-term advantages to be gained from standardisation by putting all its own stationery and paper production on to a continental basis A series size. I have no doubt this would help to get things moving. In Sweden it took fifteen years from the word go to get 100 per cent standardisation of paper sizes, and it was achieved by approximately the early 'forties. British Standard 1311 was first put out in 1946, twelve years ago. Progress has been almost negligible. It is increasing very slowly but few of us, I think, in this chamber will see the full advantage of this unless we do something drastic to urge this matter forward.

The initial decision by the British Standards Institution has been taken, and all that is required is that we should follow it up very quickly. We architects as individuals could do a lot by putting our own stationery right. It is now possible to arrange to obtain stationery of international size, and that also would do a lot of propaganda for what is a fundamental point.

On the question of classification, we know that the American Institute of Architects have published one for industry since 1920. Their system is now old-fashioned. As with any other system, it gets gray at the temples and becomes unsystematic as knowledge develops and tries to push into the system.

In Scandinavia they have tackled the same problem and they have a system which is becoming very widely adopted. It is considered extremely successful.

Undoubtedly one thing that would help us a great deal is pre-classified information. I see no reason why it should not be possible. If we were to adopt the Scandinavian system the matter would be much simplified.

Mr. Charles F. Scott [*A*]: Mr. Bird has given us a lot of the fundamentals behind this broad subject, and I do not wish to comment on those, because I agree so much with the way in which he has admirably expressed the approach which should be made.

I want to take a more domestic issue. One of the problems, it seems to me, is the mistakes that can be made these days on very simple matters, mistakes which come about by the increasing need to use complex materials in a very precise way.

Mr. Bird has told us that some of the development councils—I think perhaps the lead people are among them—tell you what you should not do as well as the things which you should do. It seems to me that this reiteration of the principles in user technique is important, and I hardly think one could expect a manufacturer to do it to the same extent as some of the development councils.

I am wondering whether Mr. Bird could tell us whether he thinks it is possible in any central body to give, as it were, a 'Good Housekeeping' diploma in materials and their usage.

Mr. Bird: I did say in my paper that I thought no information service ought to issue a 'Good Housekeeping' diploma unless, as in the case of gas and solid fuel, they had unassailable research organisations which could do the tests and issue the certificates. Anything done by the industry

itself, without such resources, would be highly dangerous and would lead to a great deal of trouble. I am talking about performance, not necessarily design, because design is a matter of opinion but performance is not. Performance is fact and has to be ascertained.

Mr. Thomas Mitchell, M.B.E. [*A*]: I could give Mr. Scott a little more information on this point or a little assurance that the point has not been completely overlooked by the Institute, in that the Science Committee has taken the matter into active consideration. We have done so for a very long time, but this year we have had two very thorough discussions with the two bodies which perform this service in this country—the Consumers' Advisory Council of the British Standards Institution and the corresponding private enterprise body. Whilst we see nothing concrete in front of us yet, I do assure you that the matter is under active consideration.

I do not want to go into Mr. Bird's paper, but I should like to congratulate him, since I was responsible for promoting the idea. In particular, I want to congratulate him on making the point that an information service or a well-ordered series of facts which you can get at by pressing a button does not make an architect. I hope everybody here is very clear about that. I am very grateful to him for making it. None of us who are pursuing this matter of the complete breakdown of communication—and that is what is happening—is under any misapprehension about that.

What we do want to do is to save the architects' time so that they can be architects. If I could make one little plea which Mr. Bird did not put in his paper, it is this. Every architect spends a considerable number of hours every week merely reading. It may be the light chat in one of the architectural newspapers, and it may be a paper from the Building Research Station or a similar body. Everyone who writes any of the matter should consider it as a very sacred responsibility to see that it is expressed in the fewest possible words. A saving of up to 10 per cent would represent a considerable freeing of an architect's time. But the potential saving is not one of 10 per cent but one far greater.

The President: We have, I am glad to say, two of our overseas members with us—Mr. Tomkin of Durban and Mr. Hobbs of Perth.

Mr. S. N. Tomkin [*A*] (South Africa): I am delighted to be here and to have had the pleasant experience of listening to the paper and the discussion so far. The problem is one which architects in South Africa are facing increasingly and one which I believe they are not going to be able to solve entirely alone. They must look to the industrial producers for a great deal of assistance in the matter.

I think the architects and the building industry as a whole are in a sufficiently strong position to give a considerable lead to the industrialists who are pouring out this heterogeneous flood of literature. I am referring to that particular side of the matter. If the architects should express themselves as of one mind in this matter, it would have considerable influence upon them and they might so regularise the production of their printed material that they would fall into line.

Obviously, if the architects as a profession are not going to be bothered with this awful scramble in their offices, they can, once again, I feel sure, give a lead to the industry by showing their wishes in this matter.

Mr. Athol J. Hobbs [*F*] (Australia): I would like to extend greetings and good wishes from Marshall Clifton and all members of the West Australian Chapter of the R.A.I.A. to you, Mr. President, and all members of the Royal Institute.

I am afraid that this is a problem we are confronted with in Australia in just the same way as everyone else in the world. One speaker made reference to getting greater assistance in solving this problem, perhaps, by going to the smaller countries, where there are small communities. I come from a very large country, but it has small communities. We have long lines of communication and the country is sparsely populated, and our problem is a difficult one.

I am afraid there is little useful thought that I can add. The subject has been so well covered by previous speakers. But I should like to join those who have congratulated Mr. Bird on his excellent paper.

Mr. Ian M. Leslie [*Hon. A*]: I wonder if I might put one point of view that has been touched on slightly. The paper and most of the discussion has turned on the point of the standardisation of sizes and format, and so forth, with the idea of presenting in palatable and easy form the greatest amount of information. I think we are on the wrong path. It ought not to be so much what we file but whether what we file is worth filing.

If that is so, what this industry stands in need of is a national testing board. Products are produced, we are told, at the rate of 120 every six months. I should have thought that an underestimate. These things are flooding in all the time. What is the good of having all these tidy little boxes when we do not know whether the products have been tried? What we must press for is a national testing board—I should think the Building Research Station—who could say this is good, this is under test, and this is not good. Then we shall be able to dispose of a good many of our filing boxes to much better purpose.

Mr. Bird: I could not agree more with Mr. Leslie when he says that what we file should be worth filing. That is why I suggest that bibliographies on subjects should be revised or edited or looked through by specialists, someone who is really competent to do it and to pull out all the verbiage and junk and get down to the stuff that is really up to date, useful, even though it is to a certain extent incomplete. The danger of trying to be complete in everything is that you merely produce too much stuff.

On the question of testing, I would point out that the Building Research Station and the other D.S.I.R. bodies do test for manufacturers for a fee, and it is up to the architect to demand test reports—B.R.S. test reports and others. The one I am most familiar with is the Joint Fire Research Organisation with its tests on fire resistance and so forth.

If when a new sheet material, say, is produced the architect does not ask, have you got a spread of flame classification for this? then he does not really—I won't say know his job but know what is available to him as a guarantee of performance.

Mr. J. Brunton [*A*]: We have heard Mr. Bird show very ably tonight that some form of filtering and dissemination of general information is required. We have also heard of attempts before the war to set up some organisation or consider some organisation and work out how this should be done. We foundered on the rock of who was to pay for it and who was to do it.

I do not pretend to offer a solution to this problem, but I would suggest the most likely line of inquiry on this problem lies in Mr. Bird's third group—materials and equipment.

This spreading of information has as its principal characteristic the need to sell. It is a commercial basis, and what is more it is motivated by the need to sell to us, to architects who use the materials. Therefore I would suggest that it can be controlled. We hear that a great deal of information which is produced on the subject of materials and equipment is completely unnecessary and is misguided. If it could be controlled to better effect it would be considerably reduced in quantity. It would also be possible to achieve considerable saving from the point of view of the commercial concerns producing this kind of literature.

I would suggest that this saving could be utilised, in paper any way, over the long term, to help promote the filtration of generalised information to the architect. It would have to be done not by the Institute or a professional body, as suggested tonight, but more through some commercial organisation which received official recognition.

Mr. Howard V. Lobb, C.B.E. [*F*]: May I comment, because of the wider circulation which Mr. Bird's talk is likely to have in the technical press, that almost 99 per cent of the circulars that come into my office every day go straight into the waste-paper basket? If that remark is heard by the manufacturers and the people who take the trouble to send these out to architects, and I am quite sure I am not alone, they might do something to standardise the sizes of these things and to standardise the proper preparation of technical information, so that when we get this information we are likely to refer to it properly.

I believe I am right in saying that one of our committees here suggested that a standard postcard might be available for architects. When they get a catalogue which is interesting but is the wrong size or does not give the right kind of information, they might send this standard postcard back to the manufacturer, pointing out that he has sinned. If enough of us did that, we might possibly improve standards.

Mr. Bird: If architects do not tell the manufacturers, they do not know.

Mr. W. A. Allen: Could we supplement Mr. Lobb's remarks? I believe these cards are available at the Institute. I do not know whether we charge for them or not. I do not think we do. Perhaps the Secretary could tell us.

The Secretary: They are available free on application.

Mr. R. F. Henniker [*F*]: I should like to support Mr. Lobb's comment, but there is one other piece of information which we might broadcast, and it relates to the distribution of trade literature. Most trade literature is distributed through the channels which are laid down by the publicity managers of the various bodies. Because it is easier to distribute it through them, it is also usually easier for the publicity manager to deal with the contents. The publicity manager in many places is given the technical content and adds an enormous amount of what he calls 'presentation'. He produces in this way the ghastly documents which we get. We want to put across to a great many of these firms that we are not in the least interested in their publicity management but we are interested in their products.

Mr. Vivian Levett [*A*]: If I may come in there, I think we are barking up the wrong tree. We are interested in the products of these people who are offering them to us but are we really correct in assuming that they all want us to know all about their products?

Much of this 99 per cent of the literature that comes in to us is so uninformative that I really doubt it. It is such a difficult job to get information out of the supplier or manufacturer. As regards trade literature, which is just one section of technical information, I really wonder whether we are going to get anything at all. It has been a long and steady fight. Many improvements have been made. But I do feel we should face the fact, unpalatable as it may be, that a lot of the stuff that is hurled at us is meant to deceive, not to inform.

Trade literature constitutes perhaps the great bulk of the information that comes to us, but it is far from being all. I was very interested to hear Mr. Bird telling us about analysing and listing information. There are so many different kinds of information, and it is very difficult to get hold of some of them—legal requirements, by-laws in the London County Council area and so on. A lot of the law of building is case law, and it is practically impossible to get to know whether a waiver has been given for a particular matter before.

I wonder whether that is not one field in which our Institute might take a positive stand.

Coming back to user requirements, I should like to see the Institute—that is ourselves—making up our minds and publishing our position on the reporting of a job that has been done.

Standardisation of presentation has already been criticised as being only half the job: it is no use having a lot of useless information standardised. But if it is standardised, it is a little easier to cut through the rubbish and get down to what you really want to look at. But there is no standard method of presenting a job when it is finished. There are several in use. The ARCHITECTS' JOURNAL has one which tends to be so all-inclusive as to defeat one's researches very often. The Dutch Building Centre started some ten years ago to produce standard reports on completed jobs.

I wonder whether something of this sort would not be helpful for us.

Mr. E. J. Bee: I think a lot of this rests solely with how the information is handled. Trade exhibitions and trade periodicals should be sifted at all times. The trade representative is contacted, then he is asked to examine a copy of a standard card giving the B.S. 1311 sizes for trade literature. He should be asked to provide an eight-point trade letter which would give the architect first the date of his call; secondly, a complete set of his current printed literature right up to date, the current prices, and/or method of tendering. This should be contained in a standard folder, on the outside of which should be attached the representative's card.

The third point should be a brief list of jobs carried out under the direction of the firm of architects he is visiting, together with the name of the architect-in-charge, the amount of the subcontract and its cost. This point stresses inter-office liaison internally. You can proceed from group to group and architect to architect and check how this product or firm or service reacted —excellent, good, bad, indifferent for the function or service required to the specification laid down.

Fourthly there should be a very brief list of jobs in which this product has been used which have received a very good recent technical press, architect's name, amount and cost.

Visits to contracts and buildings listed to see the products actually in use are very informative. Is it a good job? Or you can always contact the architect.

The fifth point requests that photographs or samples should be classified legibly including exactly where they can be found together with any information on technical specifications, research digests or issues of the architectural and trade journals. Again, classification requirements in materials and methods of work done abroad, together with lists of agencies, jobs completed. Performance, etc., should be listed briefly.

The final paragraph should give anything special which your firm thinks the architect should know about your product. Get this on two quarto sheets. Examples of newest developments in materials can be obtained in portable sample form and shown in a small exhibition, which should be representative of all exhibitions and trade shows.

The architect demands a material or fitting, wants this or that, gets the above trade letter. It gives a great deal of concise but brief information—the record card is on the file. The sample is in the office. Date, stamp, one, two, three, sign the card. Two minutes to satisfy the request! Does this work? Yes. Possibly only 5 per cent of the issues from such a centre are at one time outstanding on loan to the professional staff. The rate of issue is some 3,000 per annum. They can be stacked up on the lateral filing system up to 5,000 items either visually or in the form of back-book catalogues. It is a fight to get people to put their names on the backs of the publications, or it can be filed on the ordinary lateral filing system. It should be possible to keep the samples in order, and to request manufacturers' test certificates if you are in doubt with regard to durability.

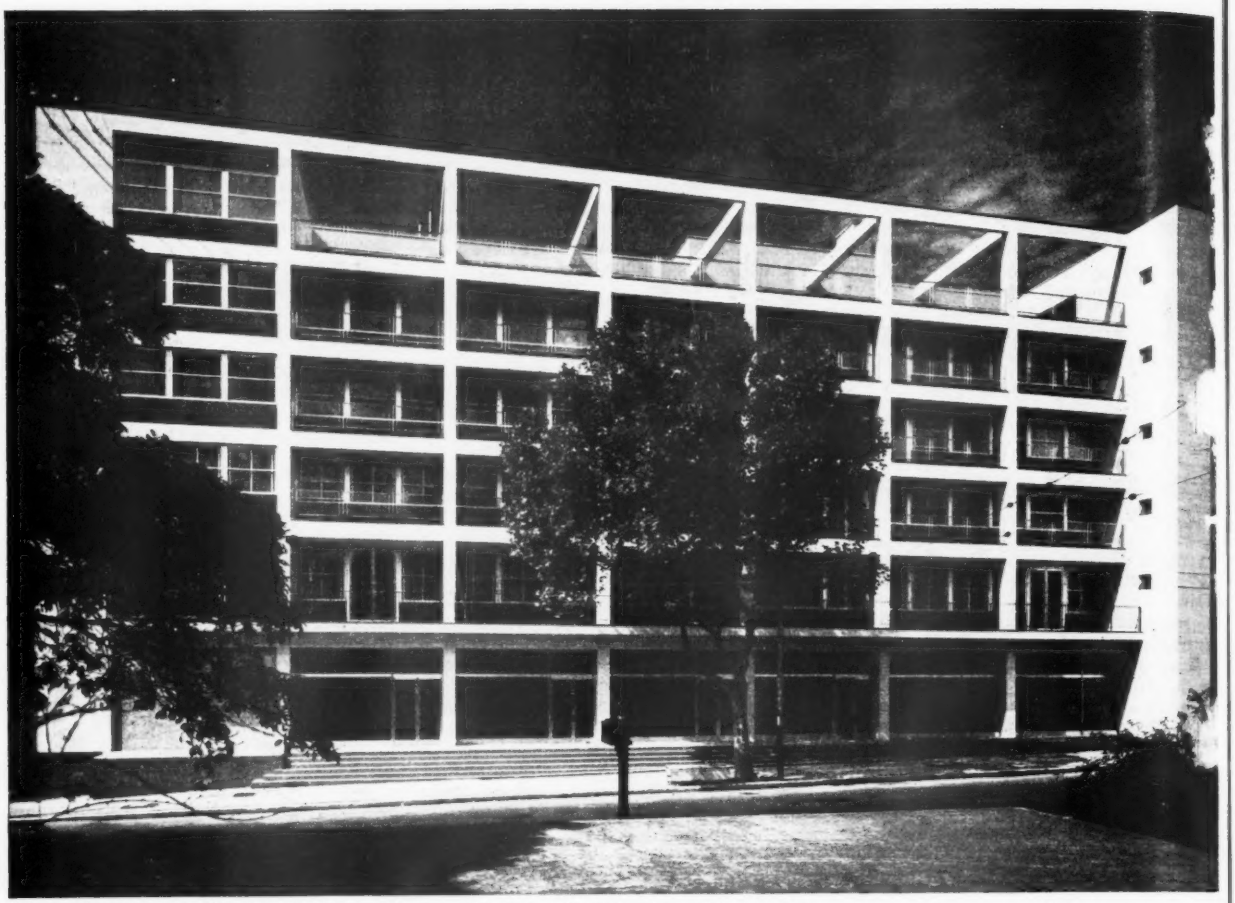
You have now quite a lot of practical experience to draw on, as well as technical knowledge of the working in the professional office. A form of standardisation could be introduced with the help of the Ministry of Information and Building Research Station and the very excellent Ministry of Works Library, which has not been mentioned. The latter is described in the June 13th issue of THE BUILDER.

Mr. Bird: I should like to thank Mr. Allen for moving the vote of thanks. I was a little scared when I discovered he was going to do so, because I know he has an incisive mind. I was very grateful to Mr. Woodbine Parish for seconding the vote of thanks. He is quite right: the ultimate aim of this is productivity.

I have a whole series of notes which I won't refer to, but there is one point that Mr. Woodbine Parish mentioned and that was touched on by other people and that is where could we get the money for a better service or services?

Now, when the Sir Raymond Unwin Committee was sitting, this question was raised, and Mr. F. R. Yerbury, Director of the Building Centre—he was not then my chief—made one suggestion and that was a tax on building contracts. An amount of 1 or 2 per cent, whatever was desirable, would raise a very big sum of money and would pay for a better service, and not one cent would be lost in the general improvement.

I might point out that this has been done by the coal industry for welfare. They got statutory rights to put one penny charge on every ton of coal and the whole of their welfare services are run entirely from that fund.



Above: Elevation to College Street. Below: The memorial foyer. The abstract mural by Douglas Annand of Sydney is executed on cross-ribbed glass sheets with the colours fired on from behind

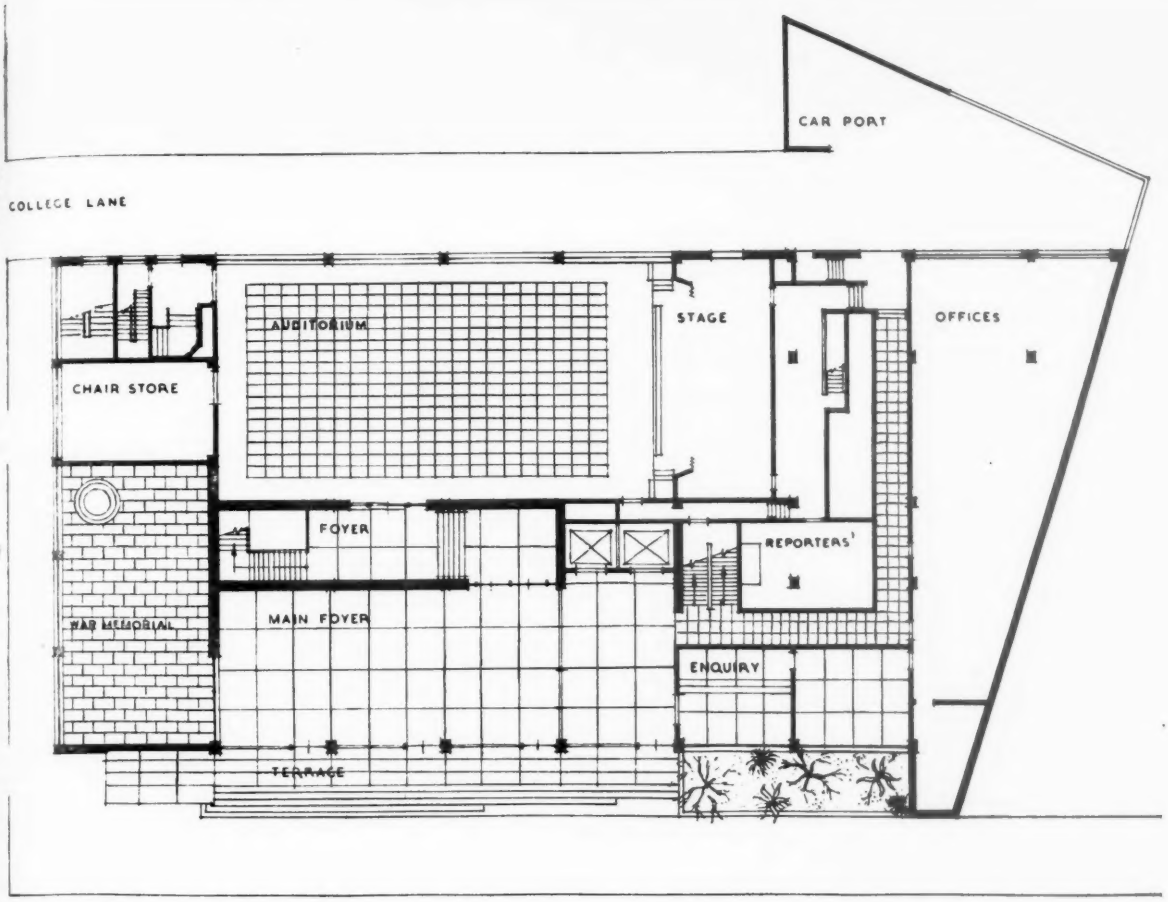
Anzac House Sydney, Australia

Architects: Walter Bunning and Charles Madden, F/F.R.A.I.A. [A/A]

THIS BUILDING was awarded the R.I.B.A. Bronze Medal in the area of the New South Wales Chapter of the Royal Australian Institute of Architects for the ten-year period ending 31 December 1957.

It was carried out by the partnership as the result of an Australian and New Zealand-wide competition held in 1948 for the headquarters for returned soldiers' organisations and as a national memorial to the two world wars. The money for the purpose was provided by public subscription and by the State Government of New South Wales. The original site was in the civic heart of Sydney, Martin Place, but because of difficulties encountered by rising building costs in building to 150 ft. high (which is the mandatory height in Martin Place) the Anzac House Trust decided to secure a less costly site on which a building of lower height would be permitted.

The selected site has a frontage of 139 ft. to College Street and 87 ft. to Francis Street and overlooks Hyde Park, an extensive city parkland in which a national memorial has already been erected. The adjoining sites have been reserved in the city plan for civic buildings and clubs.



GROUND FLOOR PLAN

Below: the auditorium seating 350 has a floating ceiling of maple battens designed to reflect sound downwards. The frame of the building is expressed in the porcelain-enamel sheeted columns and ceiling beams

The Plan

The main problem presented in the planning was the association of an auditorium seating 350 persons on the ground floor with an office building layout on the floors above. The economical pattern normally adopted for an office building with columns spaced at about 20 ft. centres in the depth of the building did not allow for the width necessary for the auditorium, which was 35 ft. The auditorium was required to have entirely separate entrance foyers and escape access from those of the office building to accord with local fire regulations.

The solution adopted was to plan the office building as an L-shaped layout wrapped around the auditorium, which was located on ground floor level. The auditorium is thus free of any structure above it giving the opportunity for a ceiling 16 ft. high.

The building is set back 10 ft. from the street front enabling a flight of steps and a piazza in front, giving access to both auditorium and office foyers which are continuous along almost the whole frontage. A war memorial hall is located at one end of this foyer and all subdivisions are of full height plate glass.

The office building of four floors above the ground floor is of the single-corridor arrangement with the offices each side, providing good natural light to all offices. Each floor has a gross area of 7,500 sq. ft.

The assistant architect in charge was Mr. Noel Potter, A.R.A.I.A.

The Passing Show

By The Hon. Humphrey Pakington, O.B.E., D.L. [*Retired F*]

Given at the R.I.B.A. on 20 May, The President, Mr. Kenneth M. B. Cross, in the Chair

I SHOULD LIKE to start by saying that I've done no architecture to speak of for nearly 20 years, that I'm completely out of date, and that I haven't the foggiest idea what I'm doing up in this pulpit. But here I am.

The other day a woman friend of mine told me that she had been asked to be the principal speaker at a dinner of her old college, which she had left more than 50 years before. She was in quite a state about it. 'What on earth shall I talk about?' she groaned. 'Reminisce, my dear,' I said, 'reminisce. They'll always swallow that.' So tonight I propose to follow my own advice and to start, at any rate, with a little reminiscence, in the hope that even this learned company will swallow it. And I will begin by claiming quite a long connection with the architectural world, for it will be 60 years ago this autumn since, as a boy of ten, I bought my first architectural book—a stout black tome entitled *The Cathedrals, Abbeys, and Churches of England and Wales*. And now life has come full circle for me, and I've been through the mill and come out again the other side; and all I do now in the way of architecture is to keep a miniature drawing-board and tee-square in a cupboard at home; and when a friend dies, as he does only too often now, I go along to the cupboard, and I get out my little board and tee-square, and set myself down to design a headstone or a mural tablet for the friend who is gone.

But this is a melancholy start. When I bought that stout black tome which I mentioned just now, life was only beginning for me: life in a world where Ruskin was revered, where the only pure style was the Early English—or was it the Venetian Gothic?—and where subsequent architecture had become horribly debased and had ended in complete collapse at the time of the Renaissance. My black tome of the Cathedrals and Abbeys included perforce a description of St. Paul's Cathedral, but it was inserted, one feels, rather apologetically. Indeed, the Reverend Professor Bonney, who wrote the article, confessed that he 'could admire but could not love the building'.

Twenty years later, when I started my architectural life as a student at the A.A. after the First World War, Ruskin and all his works had been thrown overboard, and the first thing we boys and girls were taken to see was Mr. Austen Hall's building for the Metropolitan Water Board. Victoriana had become anathema to the younger school of architects. Today, of course, it is thought quite safe and even rather fashionable to flirt with Victoriana, whereas in those days—the 1920's—a man who showed such leanings might well have been accused of wishing to take the lady as his mistress. Today Queen Victoria is back again: back with such force and gusto, indeed, that at a recent meeting I heard Professor Basil Spence burst into paeans of praise of the Albert Memorial. Now I fully realise that in 20 years' time all you boys will be raving about that horrible piece of work: but to rave about it now seems to me to be jumping the queue. A catholic taste is all very well, but a too catholic taste may lead to a lack of conviction: and it is conviction—aided by a certain narrowing of the range of vision if you like—which promises to make of today's architecture a style which truly reflects its age. Blinkers are useful for others besides horses.

Anyway, in the early 1920's we had nailed our colours to the Metropolitan Water Board. We knew that we were the heralds of a New Age, and the New Age meant for us the adaptation of Georgian architecture to a variety of uses for which it was never intended—a process which I observe to be prevalent in certain circles to this day. Not long ago THE TIMES illustrated a design for a new building which, it informed us, was in 'neo-Georgian styling'. The architect, according to the report, had said that he could have 'styled' it in any other way if he had wanted.

I do not know how much conviction went to this process of ours of adapting Georgian architecture. It is easy enough now to look back and pretend that we could see beyond the neo-Georgian: easy enough to pretend that in those days—in 1920—we knew that we were on the eve of startling developments. But we didn't know it—I didn't, at any rate: nobody ever told *me* anything—and for us the neo-Georgian was the style of the future. There were rumours of great things happening abroad, certainly, but then foreigners were queer people, and 'Rule, Britannia' was still the motto.

In this flight from Queen Victoria and All That there were certain taboos, and one of the chief taboos was the plate-glass window. A window without sash-bars, both vertical and horizontal, was no longer allowed. Some housewives might complain that all these sash-bars made window-cleaning more difficult, but we were ready with the eminently practical answer that it was much cheaper to break one small pane than a whole big window. To this the housewife retorted that she wasn't in the habit of breaking her windows, and we then had to produce the aesthetic argument—always the last resort in this country—and say that it was absolutely necessary to have the sash-bars in order, so to speak, to carry the eye across the void.

Life, however, was speeding up; and a few years later it became necessary to carry the eye even more quickly across the void. With this end in view, the vertical sash-bars were omitted. Wider yet and wider became the fashion for windows, the general effect being that they were made of elastic and pulled out sideways, or perhaps that they were ordinary windows reflected in one of those contorting mirrors found on the pier of a seaside resort. Horizontality and streamlining were all the fashion, and of this fashion the elastic-sided window was an enthusiastic supporter.

This type of window has now had a long run, due, I suspect, to what is known as stock-piling at the beginning of the war. These elastic windows have had an unfortunate effect on elevations, especially where applied to what are known as 'traditional' houses. And incidentally I do dislike the Housing Manual use of the word 'traditional' to describe any building whose chief components are bricks and mortar. Throughout history the tradition has been to experiment. It is the 'contemporary' buildings which are in the true tradition today.

But we must not digress: we haven't finished with sash-bars yet. Having been born, so to speak, with a sash-bar in my mouth, you may imagine my surprise when I began to look around me after the Second World War, and not a sash-bar could I see! Clients were complaining about it, of course, as they always do complain about everything. 'Suppose they broke a window,' they said, 'there was a whole great new sheet of glass needed!' 'Oh, but one doesn't break windows', the architect replied, and anyway, sash-bars were unobtainable owing to the shortage of steel. 'But surely,' said the more intelligent client, who knew his stuff, 'surely, don't sash-bars, so to speak, help to carry the eye across the void?' 'Ah,' said the architect, 'they used to do so, certainly, but they don't now. You see, if you haven't got any sash-bars, the eye is allowed to rest upon the voids, and if your voids are well placed, as I think mine are. . . .' The client went away satisfied, having picked up a new *cliché*. I've never heard an architect admit that he just left out the sash-bars because all the other boys were doing it.

And talking of windows, what has happened to that playful little feature, the corner window? As students we were brought up in the firm faith that the corners of a building must not only *be* strong: they must *look* strong. Any window straying too near the corner was told firmly to keep back. And then one day at

the A.A. we were set to design a country house to the requirements of an actual client. We were still in the neo-Georgian era, yet this client, if you please, demanded windows on every corner of the house! We were shocked beyond measure, and there was talk of strike action. But most of my fellow-students ratted and took the line of least resistance, and obediently slid their windows along to the corners: but I, being a man of principle, refused firmly to have anything to do with corner windows, and was marked down accordingly.

Not long afterwards, however, the corner window began to creep in—or rather, it began to creep out—and we all started taking bites out of the corners of our neo-Georgian buildings. I think it was the fault of the Dutch, who were very popular about that time, and who would design little brick towers with corner windows all the way down, looking like the buttons on a waistcoat. But where is the corner window now? I saw a couple on a new building at High Wycombe the other day, and it gave me quite a nostalgic feeling. One may, of course, forget that one has corners nowadays, and have a complete wall of glass and balance anything one likes on top of it, without suffering any aesthetic discomfort: and the ease with which one can get used to anything makes one realise how unwise it is to write books on the theory of architectural design, and how wise to incline to an empirical view of the matter.

A modern fashion which seems likely to stay for a time—I will not venture to say more in this changing world—is the boxing-in of a window with a narrow surround which projects slightly from the face of the wall. Doubtless there is some technical term for this feature which I do not know. This boxing-in seems to have become almost obligatory, and I believe it to be sensible from the structural viewpoint. Moreover, it emphasises the importance of the window, gives it definition, and suggests that that particular window was meant to be in that particular place and nowhere else: and I still believe that fenestration is of some importance in design. We all have our pet detestations, as I have learned from serving on an advisory panel, and mine is the man who uses the ends of his building as a refuse-dump for all the little windows he couldn't get in anywhere else. But that, of course, is spec. builder's practice, not architect's.

I must, however, modify all my remarks on fenestration in the light of Corbusier's church at Ronchamp. I have only seen this church in photographs, but I understand that it is now proper to light a building by means of slits and keyholes cut at random in the walls. I must say that I wish Corbusier had thought of this idea while I was still in practice: it would have saved a great deal of the trouble I took over my windows.

Still talking about fenestration, there is another type of window new since my day and still with us—the picture-window, antithesis of M. Corbusier's slit and keyhole. I do not possess a picture-window: nor at my age am I likely to acquire one. But I see no objection at all to this feature provided there is a pleasant picture to be seen through it, and not, as in one case I know, a composition of dust-bin, corrugated iron garage, and dish containing the cat's dinner. Those who are thinking of investing in a picture-window, however, should remember that it is a double-edged tool, and that the occupants of the house may easily be mistaken for wax-models in a shopfront.

I have noted with pleasure the wall of glass which can be such a delight in the living-room of a house in the country, provided one can afford the extra heating and the outsize curtains, of course. With such a wall of glass one may sit in the room and imagine oneself to be in the garden. Indeed, one may actually be in the garden, for it is now compulsory to introduce a range of exotic plants and train them over the living-room walls, where they grow and thrive with their host of not-so-exotic spiders, bugs, and beetles.

We have now done windows, and will start on roofs. Here the changes in my time have been even more startling. The requirements for a roof when I was young were, firstly, that it should not let in the rain; and, secondly, that the whole roof should not get blown off in one fell swoop. Hipped roofs were the fashion, being considered more Georgian than gabled ends, and giving a pleasant, snug, haystack effect. But a little later snuggery and haystacks and all that were thrown overboard, and if one wanted to be really smart and wasn't afraid of getting wet, one experimented with a flat roof. And now, of course, back we have gone—in domestic work at least—to the dear old gables. But it is not considered proper to give as reason that gables happen to be all the rage at the moment: one must explain that the gable gives a longer ridge-line, and is therefore more restful to the eye. The eye, you see, is always being cosseted, and quite rightly too: either resting upon the ridge, or being carried across a window.

Another popular type of roof, which would, however, have caused despondency and alarm when I was young, is the eminently sensible and economical one-slope roof, reserved in my day for the aisles of cathedrals and the water-closets of farmhouses. They were known in those days as lean-to's, but they no longer need to lean-to. They may now stand on their own, and they give a pleasant opportunity for being clever with your levels. If the roof is projected well over the front, and firmly tied on, it's quite easy to obtain a broody, Frank Lloyd Wright feeling.

Yet another modern development is a thing called a 'butterfly roof', because it dips down in the centre instead of sticking up, and that, of course, is just what a butterfly does. If the object of this type of roof is to save one downpipe, I don't think it's worth it, for to my eye it gives the effect that there's been a mistake in the calculations and the thing's fallen in. I have generally seen this roof on single-storey buildings, presumably because with such buildings it is easy enough to nip up and clear away the leaves, snow, and other impedimenta which have settled on the butterfly's back. I would not be thought, however, to criticise the butterfly roof too severely, for I do realise that it allows the eye to rest on one rainwater pipe instead of squinting at two.

From roofs we may pass to chimneys. A chimney's a chimney all the world over, but some modern chimneys are considerably more than chimneys. I refer to those vast rugged erections of random rubble, with at least one side battered. These probably originated with the late Mr. Voysey, but have now been appropriated by the Daily Mail Ideal Home, in which a few rather flimsy glass apartments may be moored to this stout structure in the hope that this will prevent their being blown away.

At the other end of the scale of chimneys is the stovepipe, which is a striking feature of some contemporary designs. This type, however, has yet to attain general popularity, as the less intelligent clients complain that they don't want their houses to look like gipsy caravans. On the whole, therefore, chimneys cannot be said to have progressed very much in the last 40 years. They still stand between the two extremes, virtually unchanged—mere hollow rectangles of brick. I know one such chimney which pins down a modern house as delicately as a butterfly might be pinned in the specimen case.

Closely allied in spirit to the stout chimney is the change of walling material, without which no building can be considered 'contemporary'. It is now almost compulsory—or was when I last looked—to have a bit of rough stone walling near the door, where the building is most likely to get kicked: the inference being of course that it is the sort of building one is likely to want to kick. There must also be some vertical cedar-board, preferably between the windows, though anywhere else will really do as well. These features give a contemporary air, but are classified as '*clichés*' by those who have given up using them. Now a *cliché* means a hackneyed literary phrase, or in other words a phrase made common by frequent use; and an architectural *cliché*, by the same token, is an architectural feature made common by frequent use. Under this definition the Gothic synthesis of arcade, triforium, and clerestory becomes a *cliché*. I do not see how any style can develop and grow to maturity unless the lesser fry are prepared to imitate the greater, and are ready to use *clichés* and to go on using them. After all, we can't all be Gropii.

Akin to this change of walling material outside a building is the contemporary fashion for treating interior walls. When I was a student interior decoration was very simple, for it was *de rigueur* to distemper the walls in a shade of cream, this being considered 'sunny'. The woodwork was stained 'dark oak'—considered labour-saving because you could kick it as much as you liked without apparent damage:

though I don't know why people should want to kick the woodwork.

'Labour-saving' was the great slogan of the 1920's, and one Society woman went so far as to have the walls of her London drawing-room painted black. This was the death-knell of cream and dark oak and all that, and experiments were made with white floors and black ceilings till we steadied down into having walls, ceiling, and woodwork in different tones of the same hue. And then wallpapers began to seep back, after having been banished for years: the return of romance, you see. And just at the moment—unless I am already out of date—you may do anything you like provided you stick in a bit of wallpaper somewhere, and provided every other surface is done in a different colour. That kill-joy 'labour-saving' has been relegated to the kitchen. Elsewhere we save labour by letting the house get grubby. Not for us the labour of Mrs. Thomas Carlyle, who from time to time would personally clean down the wallpaper of the drawing-room with bread. Bread, of course, was cheaper in those days.

These matters I have mentioned so far are, of course, the merest trimmings, and give no suggestion of the profound change which has come over architecture in 40 years. In my student days, planning was a right little, tight little business, with a lot of stuffy little apartments above fitting neatly over a lot of stuffy little apartments below. Nowadays you could balance St. Paul's on top of a bungalow, if you happened to want to do so. And in the old days, once inside a building you really were inside: today one is apt to remain in a state of suspended animation, not quite sure whether one is indoors or outdoors. This is all very well for sunny climes, but not so good for England, where it is more satisfactory as a rule to be quite certain that one is indoors.

Again, we boys were far more symmetrical-minded than is the present generation, who have brought the art of asymmetrical balance to a high pitch of perfection—a feat achieved by an underlying sense of classic order. Today's work is contradictory stuff, fundamentally classical in its orderliness, in the cutting away of the inessential, in the mathematical precision of its workmanship: yet with a freedom and fluidity and openness of plan which is perhaps its most striking feature. And when I think of fluidity of plan, I think of that awe-inspiring interior of the Festival Hall, with its overwhelming sense of enclosed space.

This fluidity of plan is shown on a small scale in many modern houses, where heating methods have abolished the door. Here the ground floor becomes nearly an all-purpose room, where one may lounge in a corner marked 'lounge', eat in a place marked 'eats', cook, work, and kick up a shindy all in the same room: and retire periodically to what I understand is now called 'The Toilet'—still, I believe, a separate apartment even in the most contemporary houses.

Another change one may observe is in the popularity of the bungalow. I can remember designing only one bungalow in 15 years' practice, but bungalows must now be the staple diet of the domestic architect. Their popularity is due to the high proportion of the population suffering from rheumatism, arthritis, slipped discs, and whatnot. There were no discs to slip when I was young. It is now generally accepted that no person over 65 should be expected to walk upstairs. The same holds good for young persons of school age, so that the modern school has to sprawl over a vast acreage of agricultural land. Between the ages of 15 and 65 one may still walk upstairs, but in 50 years' time the remaining houses with fixed staircases will no doubt be scheduled as historic monuments. Already, I understand, the Americans are refusing to walk even on the level, and have to be ejected from railway-station to car on a moving floor.

The bungalow is eminently suitable for the country. I do not mean the bungalow square on plan with candle-snuffer roof, but the building with spreading arms and a long, low roof line, nestling into the folds of the countryside. The well-designed large bungalow, with garden, paddock, orchard, and outhouses is the modern equivalent of the Roman villa of old, and will no doubt become the farmhouse of the future.

As for that other popular contemporary type, the school; many of these are delightful, but in the more mechanical designs the classroom wings suggest rows of old trams with the wheels taken off, extending for a quarter of a mile or so. I have queried whether so much glass is good for the children, and have been told that they've got to have it because it's cheap; but I dare say you read the other day about the school where the classes have to be removed into the corridor at the back when the sun comes out. The drawings of these buildings are broken up in the foreground by some delicately drawn trees which it is hoped will be there some day, and these trees help greatly to sell the collection of disused trams to the local education authority. These trees measure the great advance in architectural draughtsmanship in the past 40 years. My trees were all Lombardy poplars.

Another building of today is the tall, narrow slice. In regard to many of these I am like the Victorian gentleman who could admire but could not love St. Paul's Cathedral. Slabs of glass and sanitary ware are not easy subjects of affection. The shape of these buildings being constant, the design of the elevation becomes a matter of pattern, as though one were incising upon a stone slab. Sometimes a design of great delicacy and delight is evolved: more often the result seems to me just dull; sometimes it is even vulgar. These great slabs stand about at odd angles over the mess of the old town, like a herd of prehistoric mammoths browsing upon the little houses around them. The fashion of putting these buildings on legs only increases the likeness. These buildings are indeed a sad commentary on the overcrowded state of our country.

Modern town-planning is another field in which immense changes have taken place. When I was a student we were much affected by the Beaux Arts tradition—though I don't think there was very much *Beaux* about us, or much *Arts* for that matter. A lay-out meant to us an uninterrupted axis, some monumental steps, a brace of fountains, a couple of my Lombardy poplars, one on either side, and rows and rows of balustrading, which I always found exceedingly difficult to draw. Town planning in those days was still the formal affair which had produced Portland Place and The Mall—a wide, monumental road leading straight to somewhere you didn't want to go to. But it is not only changing fashion that has brought in the less formal planning of today: it is a recognition that life should not consist solely of getting from one place to another as quickly as possible. Life includes a chat with a neighbour, a bargain with a salesman, a drink under the chestnut tree. The planning of today is built on the life of the individual, with its car-free precincts for the shopper, its promenades for the walker and the talker, its place for leisure and its place for rest. Modern planning fits the streets to the human scale. In my day it meant a lot of ants running round the Arc de Triomphe.

A notable example of this human planning, to my mind, is Sir William Holford's lay-out for the neighbourhood of St. Paul's, which seems to me in keeping with the English tradition. Our genius has not led to the flamboyant civic design, with everything where it ought to be, nor has it favoured the monumental lay-out: but we can show examples of great delight in the cathedral closes and market squares of our ancient towns. These have an accidental, picturesque appearance: but nowadays we plan the accidental and make it picturesque. The St. Paul's scheme, indeed, seems—to use stable talk—to be by Cathedral Close out of Market Square. The great building itself would seem to lose much of its dignity, all of its scale, and all of its essential humanity if it lay in a waste of parterres, balustraded terraces, and monumental steps.

This human planning is shown again in the best of our housing schemes: a scheme that is fitted to its site, makes use of the trees, befriends the contours of the ground, with here and there a note of surprise to arrest the attention: a scheme which blends those truly English characteristics of intimacy and variety.

The sense of intimacy, of being enclosed in a miniature world, is of the very essence of town design, but we are only now recovering the lost art. When I was young, the Garden City was all the rage. All you had to do was to throw town and country into the pot, stir well, and you would produce a satisfactory pudding. Today it is realised that the intrusion of country into town spoils that sense of intimacy and enclosure which the town should possess, just as surely as the intrusion of town into country ruins that tranquillity which is the special virtue of the countryside. In 100

years' time I suppose the world will be inured to suburbia, and will think any other condition highly undesirable.

I am lucky enough to live within a reasonable distance of Coventry, and a visit to the new civic centre is one of my outings. As one walks up the hill from the direction of Warwick one is confronted with a group of tall buildings on the summit, standing cheek by jowl as town buildings should, jostling one another like the bastion and curtain wall of a medieval castle. The massing of these tall buildings does indeed suggest memories of some great building of the Middle Ages, and the Papal Palace at Avignon came to my mind, despite the modern detail. This massing of tall buildings is not only impressive in itself: it also gives that sense of enclosure so vital in civic design.

This sense of enclosure is further emphasised at Coventry by the fact that to reach the civic centre from the Warwick road one must pass under one of the tall buildings, a feature which gives that other important element of surprise to the design. I have been in Coventry on a Saturday afternoon, and it was a real pleasure to see the citizens apparently in full enjoyment of their city—strolling in crowds along the covered arcades or sitting at tea on the raised terraces, watching the passing show. I felt as if I were in a foreign city. The realisation that a town—even though it be not a Garden City—may be a place to be enjoyed shows a difference in outlook which has appeared since I was young. It is significant that the superb main axis of Coventry, now being developed, is a shopping precinct, not a traffic way.

So ends this purely personal review of the passing show. In these last 40 years I have seen the young men grow old as they climb to the top of the tree: I have seen the babies grow up and start hacking away at the trunk. And so completely has the architectural outlook changed in those years that it is easy to fancy that the young men of today are turned out in a different mould, are somehow fundamentally different from their fathers: a tougher breed, eschewing the sentimental, relying on head, not heart. But I doubt it.

When I was still a student I visited Stockholm, then the Mecca of all young architects. The new Town Hall had just risen by the waterside and was still in its heyday, and the architect, Ragnar Ostberg, allowed me to see the place lit up at night. The effect in those vast, empty, echoing coloured halls and corridors was deeply impressive, but the whispers were already going round, and in a few years' time the Town Hall had been pronounced as too romantic by the intellectuals, though reduced facsimiles of the tower and cupola continue in use to this day for town halls, churches, and the more expensive type of garage.

Ten years after visiting Stockholm I was in Norway with the A.A. Excursion, and our party were dining one night at a country restaurant set by a lake. As we were leaving, an ancient Norwegian custom was observed, and flares were lit along the lakeside wall to speed our parting, though the full moon shone on the trunks of the silver birches. I had been talking to a Norwegian architect after dinner—a modernist of a generation ago—and he had been arguing that sentiment could have no place in the make-up of the modern architect: it was all head and no heart, and he had gone on to disparage the Stockholm Town Hall as sentimental—romantic. He came up to me now as we were leaving, pointed to the chain of flaming torches mirrored in the water of the lake, and whispered: 'That's what I like! Romantic, yes?' I turned in surprise, but my friend, realising, I suppose, that he had given himself away, had slithered off into the shadows before I could reply.

That little story underlines the one point I would make: that every architect must at heart be a sentimentalist—one whose views are coloured with emotion. Such a view, of course, has nothing to do with the pretty-pretty and the curly-wurly: it means that the heart has its place as well as the head. The best definition of architecture that I know is 'Building touched with Emotion': and of one thing I am certain—that unless our architecture be touched with emotion—unless head and hand unite with heart—then it is nothing worth.

[*A number of slides were shown.*]

VOTE OF THANKS

MR. R. E. ENTHOVEN, F.S.A. [*F*]: Mr. Pakington introduced himself as if he were a sort of Rip Van Winkle, but few, I am sure, will have been deceived by this, at any rate for long; it is obvious that he has kept very much alive to what has been going on, and has preserved a balanced judgment. I am glad that he took his own advice about reminiscences, as his can always be counted on to be free from embarrassing regrets about the past, and his humour free from malice. I do not think that he can ever have been an Angry Young Architect.

He has reminded us of the definition of architecture as 'building touched with emotion', with which I think we must all agree, provided that this emotion is of the sort he means, vision based on underlying sanity. There's the rub. Many of the questionable aesthetic epidemics which we have seen illustrated tonight derive from really well-meaning but misguided injections of emotion to add a little 'grace and favour' to what would otherwise be cold and neutral.

Many of the younger members of this audience may feel that they themselves would have remained immune from the germs to which Mr. Pakington referred, but it would be unwise to be too sure. We find that virus follows virus. The window treatment of Ronchamp looked at one time like a vaccination which would spread through the schools of architecture, but in the end it did not really take. There may be others which will produce blushes in due course, relating to structure, internal functional arrangements and exterior skins. All this makes one hope that Mr. Pakington will amplify this evening's apt and penetrating comments by supplements as the years and fashions go by. Perhaps he could even include one on motor car design.

Having had the good fortune myself to enjoy his stabilising influence during the inter-war years, I am very glad that tonight this opportunity has been more generally shared. We are all very grateful indeed to him for having left the flowering orchards of Worcestershire to give us what has been a most enjoyable evening and a most informative one. He has earned the sincere vote of thanks, which I now formally move.

MR. J. MURRAY EASTON [*F*]: I am much honoured to be asked to follow Mr. Enthoven in thanking Mr. Humphrey Pakington for his delightful paper. Mr. Pakington and I are near contemporaries. He reincarnated a few months before I did, but, in addition to this little extra life-span, he has had a triple professional career which gives him such a three-dimensional view of the architectural scene as is granted to few.

The changing fancies and follies of a full generation of architects have provided him with entertainment in which he has allowed us to share. I thought that his inquest on the sash-bar, its decline and fall, was particularly apt. Yet the desire for pattern on the face of buildings, which sash-bars once helped to provide, keeps bobbing up. Mr. Edward Stone, a well-known American architect, has brought the wheel full circle by shrouding complete buildings in geometrically-pierced screens. There must be people who would like to do it here. Trafalgar Square would seem the ideal trying-out ground. The penetrations would provide each bird with a roost of its own, and the combination of art and nature in a diaper of pigeons and starlings would be irresistible.

The 'twenties and 'thirties, just like the 'forties and 'fifties, were fertile in producing crops of theories about education. A friend of ours more or less insisted that we should send our children to the only school which he knew to be absolutely free from any risk to its pupils of psychological rape. But the drains proved to be unusually defective and an outbreak of typhoid blighted the experiment. Twenty-five years later, one of the glossy monthlies has staged an all-out offensive on the architectural schools of today. Psychological rape may take the form of teaching young people things that they do not feel like learning, or else of their being taught by people they do not want to learn from. The latter seems to be that particular critic's chief complaint.

Perhaps part of architectural, or any, education consists of an instinctive rejection of what is not wanted, coupled with a capacity to extract pearls of wisdom from the nostrils of those that the student may well consider swine. It is hard to believe that the international stars of the profession became such as the result of a perfect education. In some cases it must have been

their reaction against what they were taught which set alight their powers.

The writer of the article previously referred to had a simple remedy for the alleged ills of our schools of architecture: sack the lot—meaning the present-day masters—and get young blood in. This is a cruder version of the procedures described in that now famous work 'Parkinson's Law', by means of which each generation can hope to push the one senior to it out of the nest, and itself take vacant possession. This is the oldest game in the world, and it is a good one to watch if the profession concerned is other than one's own. Thus, editors and architectural correspondents mostly tend to be keen supporters of the younger side, and, though themselves apt to be middle-aged, can enjoy a bit of barracking or even throwing an over-ripe tomato at some grave senior, and a quick turn-over is good for the circulation! But they realise that it would be the betrayal of a sacred trust if they were tempted to hand over control to people so much callower than themselves.

'The Passing Show', besides being most entertaining, helps to remind us that it is a good thing to hold on to our sense of perspective. I have great pleasure in seconding the vote of thanks proposed by Mr. Enthoven to his one-time partner, Mr. Humphrey Pakington.

Mr. Basil Spence (*Hon. Secretary*): I hope that I may be permitted to add my own thanks to Mr. Pakington for his altogether delightful paper. Not only was it delightful; it was also amusing and extremely wise and penetrating. I should like to say now, however, that I still like the Albert Memorial. I am not trying to jump the queue: I like it.

It may be of interest if I tell you how this came about. I was working for Lutyens in 1929, and at that time I loathed the building or erection or whatever you like to call it. Lutyens, who knew his staff very well, but never knew the names of any of them, asked me one day what I thought of it, and I told him I thought it was horrible. I was working at the time on the gardens of the Viceroy's house. He said, 'If you think it is bad, spend a morning there and measure the steps.' I did so, and I found that there was an extraordinary relationship between the number of steps and the steps that one took physically in between the steps. I began to see that there was something romantic about it, which was meat and drink to me. The workmanship was beyond reproach. It was difficult to see what was going on with the statues, but what did that matter? It was a beautiful summer's day, and I thought it was altogether wonderful. From that moment I have loved it, and I never miss an opportunity of going to see it.

Mr. Frederick Hill [*F*]: As I too have travelled from Worcestershire, at vast expense by British Railways, to pay tribute to my old friend and chairman Commander Pakington, I am not going to waste this opportunity. I should like to add my tribute to the excellence of his talk. I had heard one on somewhat similar lines before, and it may come as news to Commander Pakington that I suggested he should come here this evening. I have known him since about 1950 in Worcestershire, where we exercise what is known, I believe, as 'elevational control', a subject which has only recently been pushed off the pages of the architectural Press by a certain annual general meeting, and which no doubt will be back again very soon. From the address which you have heard I am sure you will realise that any modern architect who has something to offer is assured of a sympathetic hearing when he puts his plans in for approval.

Mr. G. Grenfell Baines [*A*]: I should like to ask Mr. Pakington a question. He spoke of the Americans who do not want to walk even on the level and who must have moving pavements, and he then referred to car-free precincts for the shopper. Does he think that there is anything at all in the idea of designing the layouts of towns and houses in order to live with the motor vehicle? Or does he think that designing for it is what is fragmenting and ruining our layout?

The Hon. Humphrey Pakington: It is a great pleasure to see Mr. Enthoven again. I do meet him periodically. I am delighted to hear that I have been a stabilising influence in his life; I must say that I never realised that before! Mr. Easton too is another very old friend and it is an enormous pleasure to see him here. Mr. Hill is a friend whom I see fairly frequently in Worcestershire, and he is always a welcome visitor to our panel. He talks quite a lot, and always extremely good sense, as they all do.

As for car-free precincts, I am not a town planner and I do not know anything about them. All I meant was that I do like to be able to walk about in some part of the town where I cannot be run over. If it were possible to keep the cars out of the town there would be no need for these precincts, but I can do my shopping there and I like them.

It has been a great pleasure to be here again.

J. C. H.

Trip to British Columbia

Some comments on the visit organised by the British Columbia Lumber Manufacturers' Association for the successful architects in the 'Trend House' Competition.

TO ARRIVE BY AIR in western Canada is to see at once the best and the worst of the country. Set against some of the most magnificent scenery in the world (the sight of the Rockies can certainly not be equalled elsewhere), one sees from the plane the sprawl of the towns, with their small, neat, scattered bungalows and 'split-levels', and the almost universal bright coloured low pitch of the newer suburbs extending in the four cardinal directions.

What one missed, coming from Europe, was a centre of the city; 'subtopia' is an inappropriate word for the spreading development, as it implies a centre to have a sub-urb, and the roads of the Canadian city, or at least the newer cities of the western provinces, being wide and straight mean easy access in all directions, and thus no centre. Easy access; the sense of distance is so different on the American continent, and one equates a fifty-mile drive there with a ten-mile drive in England. To be told, as we were in Toronto, that 'this road goes straight due north for 180 miles' gives a new aspect to ideas of travel, and indeed this sense of grid is firmly implanted in the Canadian sense of direction. Asking for the location of a particular street, we were always told the way by compass directions; how often would this happen in England? One learns in fact to calculate mentally the distance to a given street in a city by knowing how many blocks per mile.

In Vancouver itself we were conscious of the immense timber resources of British Columbia. Not simply because of the very full and interesting programme of visits arranged for us by the B.C.L.M.A. (timber mills, logging, plywood stripping, glue lamination plants and other forms and uses of softwood timber), but because of the way in which it is used so extensively and plentifully, and dominates the visual scene. Use of timber, and the 'rush' attitude to life generally, enabled a builder to complete his speculatively-built houses in six weeks—the roofs were often in place a couple of days after the ground floor slab. Curiously, little prefabrication is used; full site mechanisation, and particularly the early use of electricity, seemed the main reason for this speed, and also the normal practice of delivering structural timber to the site ready-planed.

If new methods in design and construction are to be tried, this speed must benefit the user immensely, with the serial production following so closely on the first prototype. Yet the ingenuity of design is an ingenuity of plenty, rather than the economy we are used to in Europe. The contractor who built the six-week houses formed his internal partitions of solid two-inch planks, from wall to wall, then

marked on the door positions and cut them out with a portable hand saw, screwing on hinges and a small cover fillet if the gap were too big. The savings, in fact, are of labour and not materials. Bold, uninhibited use of timber with all its many advantages is the normal construction for anything under three storeys; and the use in most domestic work is controlled by a very extensive and carefully compiled set of regulations,* equivalent to our building by-laws, but applicable to houses financed by State Authority (the Central Mortgage and Housing Corporation), meaning in effect most domestic work at present.

Brick is the luxury material; consequently better laid and used with more respect than in England. Stone, in the form of rounded boulders, obtainable in a variety of colours, and picked off the hillside by owner-part-time-builders, is also used, ostentatiously and effectively for chimney stacks.

The standard of mechanical installations in the average house was one of the most interesting aspects of current domestic building. The climate in Vancouver is not unlike that in England, but hardly a house is built now without an adequate and efficient warm air circulation plant, or other form of full heating. Insulation standards, controlled by the regulations referred to above, are high, and achieving a good value is facilitated by timber construction.

For buildings other than houses, two localities in Vancouver were of chief interest; the business area of the city, with several interesting new office blocks of which the most notable is the British Columbia Electric Building, and the University area. The B.C. Electric Building stands well apart from other high blocks, and for that reason is more dramatic on first impression than, for instance, the Seagram and Lever buildings in New York. At night in fact it is visible from any high point in the city, and being illuminated all night is a prominent landmark. Apart from siting, there is perhaps little one could not find in some of the better office-blocks built in Europe since the war, though the details have great clarity and precision; its most original feature is a curious corrugated illuminated rib pattern up each end elevation, of blue and green glass, which shows some affinity with native Indian repetitive patterns.

Some of the best of the Vancouver modern architecture is to be seen in the University area. The recently completed Arts Faculty Building is the most interesting and impressive. Two churches are also of interest, and another noteworthy building is the Forest Product Laboratory built for the Department of Northern Affairs and Natural Resources. In this building, timber is imaginatively and effectively used for all the structure and practically all of the finishes.

The chief impression left on returning to England was that of the overall newness of everything. This was not so much from the lack of tradition, the influences of which can to some extent be imported, but from the aim to relate all new design to the present day. This is achieved with varying success and in the case of buildings the result is viewed through the wirescape of the rapid boom-town expansion. The motor age, and indeed the electronic and automation age are having their effect. In a country where buildings are expected to have a shorter life than in England, they have a brighter and often more attractive quality. It could not be said of Canada, as Sir William Holford said recently of England, that a man is not proud of owning a new house.

PETER BAREFOOT [*A*]

* "'Housing Standards"—minimum requirements for planning, construction and materials for detached, semi-detached, duplex semi-detached duplex houses and row housing.'

Inspection of Churches Measure, 1955

THE PRACTICE COMMITTEE have, at the request of the R.I.B.A. Council, been considering how best the terms of engagement under the Measure might be defined. It had been felt that the success of the Measure would depend largely on the establishment of the right relationship from the outset between parishes and their architects. For this purpose it is essential from the point of view of the protection of both sides to the agreement and in the interests of the work that the conditions of the architect's engagement should be defined as clearly as possible, and the scope of the quinquennial inspection mutually understood.

To this end the Practice Committee have recommended that appointments should be offered by letter of invitation from Parochial Church Councils to architects who in turn would notify their acceptance in writing. The Practice Committee have accordingly prepared a form of letter of invitation and a form of architect's report which, with the approval of the Council, have been submitted to the Central Council for the Care of Churches. The Central Council have accepted these and have undertaken to bring them to the notice of the Diocesan Authorities with a view to their being adopted by Parochial Church Councils.

The letter of invitation sets out the scope of the service which an architect would be asked to undertake for the purpose of a first inspection under the Measure and also the conditions of engagement which might govern subsequent quinquennial inspections. In particular it has been emphasised that the architect would not be held responsible for any omission to report on defects arising from matters which would not be discovered from a visual inspection by a competent person. It has not been possible to recommend a standard scale of fees for these services since in many dioceses schemes already operating embody a stated fee, although this must often be regarded as unremunerative even when the architect's responsibilities are limited in the manner now proposed. The Council considered, however, that 15 guineas exclusive of travelling and out of pocket expenses would be a reasonable fee for the service required in the case of an average church. For the second and subsequent inspections the fees should be on a time basis calculated in accordance with the current R.I.B.A. Scale. For the supervision of work arising from an inspection, the terms of the R.I.B.A. Conditions of Engagement and Scale of Professional Charges would apply.

The Allied Societies have been given full particulars of these proposals.

The form of architect's report on a church which has been recommended to the Central Council is as follows:—

FORM OF AN ARCHITECT'S REPORT ON A CHURCH

As agreed between the Central Council for the Care of Churches and the Royal Institute of British Architects

1. A short description of the building with brief notes on features of special interest or importance.
2. The limitations of the survey: A reference to all enclosed and inaccessible parts of the building, e.g. sealed roof spaces, boarded floors, high spires, etc., on which it was found impossible to report. Recommendations for the opening up of these spaces or examination of the fabric from scaffolding or special ladders if such measures are considered necessary.
3. A description of the materials and form of construction, and general condition of the fabric:—
   (*a*) *Walls and Masonry*—dressings, settlements, pointing, external rendering and internal plastering.
   (*b*) *Roofs and Gutters*—the condition of the roof coverings and of the fixings and linings, the condition of metal and asphalt flats and gutters and flashings, the state of the timbers and trusses below pitched and flat roofs including the presence of fungal rot and/or wood borers.
   (*c*) *Rainwater Disposal System and Drainage*—gutters, fall pipes, surface water drains and outfall, dry areas, deleterious vegetation, soil drainage.
   (*d*) *Internal Decoration*—including a note of any murals.
   (*e*) *Floors and Galleries.*
   (*f*) *Glazing*—ferramenta, ventilation and details of glass and glazing including all ancient clear and painted glass.
   (*g*) *Fittings*—including monuments, brasses, etc., organ case.
   (*h*) *Bells, Bell Frames and Clock*—a general note on condition of fittings and frame and the stability of the latter and its effect on the structure.
   (*j*) *Boundary Walls and Gates.*
   (*k*) *Installations*—the opinion of the architect as to whether reports from specialist engineers on heating, lighting and lightning-conductor installations are necessary.
4. Summary of Recommendations:—
   (*a*) *Maintenance*—a brief description of essential periodic maintenance required.
   (*b*) *Works of Repair in order of priority* and with approximate estimates of cost.

Signature of Architect .....
Date .....

Report of the Joint Sub-Committee of the Practice and Salaried and Official Architects' Committees appointed to inquire into the employment of Architects on the Salaried Staffs of Building Contractors*

Chairman: Mr. Leonard C. Howitt, Vice-President

The Background:

(1) In November 1955, the Allied Societies' Conference, accepting a proposal from the Manchester Society of Architects, put to the Council a recommendation that the employment of architects on the salaried staffs of building contractors should be the subject of investigation. Special attention should be directed to those contractors who offer 'all-in' services; to any adverse effects of such services upon the interests of the profession and of the building owner; and to any action that might seem desirable to protect those interests.

(2) Similar and separate complaints about what was alleged to be a growing practice were later received from the Northern Architectural Association in the form of a memorandum, from other Allied Societies, from the City and Borough Architects' Society, and from the County Architects' Society.

(3) The Council referred the matter to the Practice Committee and the Salaried and Official Architects' Committee, who set up a joint sub-committee to carry out the inquiry.

(4) Briefly, the main points of complaint were:—that large contracting firms are increasingly employing architects on their salaried staffs and not as independent consultants, and are thus able to offer the client, for a given building, a comprehensive service from site investigation to completion; that under this arrangement the architect is not engaged in his traditional and proper role, lacking both the standing of an impartial and independent arbiter as between contractor and client, and the freedom to select the materials or form of construction he considers most appropriate; that he is, in fact, the servant of the contractor, whose interests he is paid to promote; and that the system as a whole depreciates the architect's status and constitutes something of a menace to the future of the profession, while depriving the building owner of some important safeguards.

(5) Early in their deliberations, the Sub-Committee recognised a distinction between the employment of architects on salary by contractors, on the one hand in their normal course of business (including the speculative development of land for letting or selling), and on the other for the supply of those all-in services which are the primary cause of anxiety among members.

In an Interim Report submitted to the Council in October 1956, the Sub-Committee concluded that the former practice is unobjectionable and quoted the A.R.C.U.K. and R.I.B.A. Codes of Professional Conduct in support of this view. They accordingly recommended that no new provision forbidding the normal employment of architects on the salaried staffs of building contractors be added to the R.I.B.A. Code, and the Council accepted this recommendation.

They went on to argue that, while the offer of all-in services was a complex question requiring deeper study and on which widely divergent views were held, it would not be pre-judging the issue if A.R.C.U.K. were to be asked to call the attention of Registered Architects to Principle VIII of their Code, and in particular to that clause which enjoins upon the architect employed by a building contractor the duty to inform clients that he is not professionally responsible to them, but to the contractor who employs him. The Council agreed to make this request of A.R.C.U.K., which has since been carried out by way of a note in the latest A.R.C.U.K. annual report.

[Some doubt was expressed, especially by the Allied Societies' Conference, on the power of a salaried architect to give such a warning to a building contractor's clients. It was decided, therefore, to refer this point to the Joint Consultative Committee of Architects, Quantity Surveyors and Builders for consideration and comment.

Another point which has been referred to the J.C.C. for consideration is the propriety of advertisements illustrating buildings erected by building contractors and showing the names of the architects responsible for the designs as if the latter were independent practitioners.]

Finally, the Council authorised the Sub-Committee to embark upon a more detailed investigation of all-in services, and it is with the results of this fuller inquiry that the following paragraphs are concerned.

Evidence Taken:

(6) The Sub-Committee thought it best in the first place to take evidence from building contractors offering, or having knowledge of, all-in services, and from architects employed by such contractors. A meeting was held with seven members of the National Federation of Building Trades Employers (including the President and the Director). The main points made by these N.F.B.T.E. representatives were that they were not aware of complaints that buildings erected under the all-in service system were aesthetically or qualitatively inferior to those commissioned to private architects; that the speedier completion of a project was the main advantage; that many of these projects were industrial, where speed in erection was often of even greater importance to the client than capital cost; that the building owner had complete freedom of choice to decide whether to use an all-in service or commission a private architect; that many all-in services involved the use of proprietary systems of construction which, to be exploited to the fullest advantage, required the collaboration of architect and contractor from the start; that the success or failure of this service depended upon how far it found favour with the client; and that if it succeeded there was nothing the R.I.B.A. could do to stop it, nor would the N.F.B.T.E. feel justified in discouraging it.

Further, most of these representatives were candid in passing on what they claimed were widespread criticisms reaching them from various parts of the country of the services provided by some architects. Of these shortcomings, which were alleged to be substantially responsible for the development of all-in services, not the least damaging were said to be the complicated procedures traditionally used for the preparation of designs and their translation into buildings, for these were a major cause of building delays.

(7) The Sub-Committee next heard the views, at separate meetings, of two Chief Architects, employed by two leading building contractors.

The first of these said that besides their own speculative building, and work obtained in the normal way of competition, his company also dealt in proprietary systems of housing construction which were offered to local authorities. In the case of many of the larger local authorities, the firm collaborated with the authority's own architect, who prepared a basic design. In every all-in service contract undertaken by his company, the building owner's interests were protected by his own professional adviser, who might be an architect, engineer, surveyor or building inspector. This Chief Architect believed that, while his employers engaged private architects independently, their own all-in service was usually quicker, cheaper and more efficient, because private architects were not familiar with the various aspects of the contractor's organisation that influenced the design of their buildings. In the field of private house

* The Interim and Final Reports of the Joint Sub-Committee were approved by the Council at their meeting on 17 June. Interpolated in the report are notes in parenthesis of action taken.

building it was widely felt among the general public that a house designed by a private architect and built under contract would be more costly than a 'builder's house'. From his own and his staff's point of view, the level of salaries offered by building contractors was an attraction, as was the opportunity to gain experience of contractual methods. It was a great advantage to have, immediately to hand, full information about the availability of plant and machinery as well as the advice of specialist technical staff. While ultimate policy necessarily rested with the Board of Directors, he was given every opportunity to advance views which might influence the design of a building.

The second Chief Architect explained that, in the case of his company, the idea of an all-in service had originated in approaches from landowners after the last war for the design and erection of farm buildings; but that this kind of service was now used chiefly for large industrial projects. Substantiating much that the Sub-Committee had heard already, he confirmed that the primary concern of these industrial clients was a quick start and speedy completion; that they were always encouraged to engage an independent quantity surveyor; and that in any event they always employed some professional adviser to watch over their interests. The company made no direct offer of all-in services. They were themselves approached by clients, industrialists in the main, for whom they had carried out work in the past through the normal medium of competitive tendering. There was no greater difficulty in recruiting architects into the company than were experienced by private architects generally, for they were attracted by good salaries and the chance to work in a team with quantity surveyors and engineers—an arrangement which, he felt, gave assistant architects a more realistic view of building than was possible for them in a private office.

(8) Finally, the Sub-Committee had the benefit of evidence from the Honorary Secretary of the Northern Architectural Association (who was also present at the meeting with the first Chief Architect). He subscribed to all the heads of complaint listed in paragraph 4 above, and while fully appreciating the difficulties, nevertheless held to the view that both the R.I.B.A. and A.R.C.U.K. should take immediate measures to prohibit—immediately so far as possible and eventually altogether—the employment of architects on the salaried staffs of building contractors.

Possible Action:

(9) Reviewing the evidence taken, the Sub-Committee have considered what action may be open to the R.I.B.A., to help, if possible, those members who see their livelihood directly affected by the growth of all-in services; and they have therefore aimed to exhaust first whatever remedies restrictive legislation might have to offer;

(*a*) A.R.C.U.K.:—The relevant section of the Architects (Registration) Act is that which provides for the removal from the Register of the name of anyone found guilty of 'conduct disgraceful to him in his capacity as an architect'. In the recent case of Hughes *v.* Architects Registration Council, the effect of the ruling then given seems to be that A.R.C.U.K. cannot decree that an activity constitutes disgraceful conduct if the architect concerned has hitherto been allowed to pursue it unhindered over a long period. It is true that the Court's decision could be said to relate only to activities carried on before the Registration Acts, and that it does not limit A.R.C.U.K.'s powers in respect of new entrants. Nevertheless, it seems very unlikely that A.R.C.U.K. would wish to raise the issue, especially in view of so recent a decision against them. If, however, they did legislate against employment of architects by contractors for all-in services, and even maintained the new position unchallenged, the effects are unlikely to include any significant decline in the volume of all-in services. Contractors would need to hire 'architectural designers' instead of 'Architects' to overcome the statutory difficulty thus created; but while this change in nomenclature would be a hindrance to them, it is hardly to be supposed that it would irrevocably damage their case with hard-headed, if perhaps uninformed, clients, any more than that they would have undue difficulty in recruiting enough qualified architects willing to forgo the privilege of Registration for the sake of what are evidently satisfying appointments.

(*b*) R.I.B.A.:—The R.I.B.A. Code is more widely drawn, in that a member can be reprimanded, suspended, or expelled for conduct 'derogatory to his professional character' or 'inconsistent with his status as a member or student' or for activities 'inconsistent with the profession of architect'. Ignoring the problems that occur if the R.I.B.A. and A.R.C.U.K. Codes do not run reasonably in parallel, it seems to be open to the R.I.B.A. to forbid members to take up employment with all-in service people, provided saving clauses are added to exonerate those already in such employment. But it is hard to see what practical purpose this would serve, for we might then see the all-in contractors manned by non-members, and be preserving the purity of professionalism without removing the cause of anxiety.

(10) The Sub-Committee are therefore led to the clear conclusion that restrictive legislation outlawing participation in all-in services would be ineffective and should be rejected.

Nevertheless, it is worth noting that the R.I.B.A. Code, as it relates to employment by contractors, is at present anomalous. By its provisions, the 'leader of the building team' may be employed in the industry in a subordinate capacity but not in a controlling one, since he is forbidden to be a director.

(11) Rejecting legislative action to combat the all-in service, the Sub-Committee see the problem as a simple case of direct competition to be frankly faced and, like any competition, to be effectively countered only by achieving greater efficiency and ingenuity in the same field, or by offering an even better alternative.

(12) The contractors and contractors' architects interviewed left the Sub-Committee in no doubt that in their view the shortcomings of some architects in adhering strictly to a time-schedule, and in precise and efficient project management generally, is a principal cause of clients turning to contractors for an all-in service. Making liberal allowance for the opportunity the occasion may have offered for uttering generalisations argued from particular cases, the Sub-Committee are nonetheless persuaded that there is a strong case for the development of courses in management techniques, to be taken both at appropriate stages during formal training and, since nobody can safely cease learning, at intervals in a modified form throughout the architect's working life.

[Further consideration is being given through the Conference of Allied Societies' Public Relations Officers to the possibility of more active publicity in the provinces, such as the preparation by Allied Societies of Year Books which contain illustrations, analyses of cost of projects, etc., of work commissioned under the traditional procedure.

It was also left to the Ad Hoc Committee on Representation of Members in Salaried Employment and Review of Structure of the Profession to consider the possibility of producing tables of comparative costs and time schedules to see whether, in fact, buildings erected by the 'all-in' services method were cheaper and more quickly constructed. The Committee will be going into this point shortly.]

(13) No less prominent in the discussions was the question of advances in technology, building techniques and the use of machinery for construction, with which it is so difficult for the independent architect to remain sufficiently familiar, but which are so readily available to the contractor's architect as he designs. The Sub-Committee welcome the forthcoming changes in syllabus for Intermediate, Final and Special Final Examinations, which place greater emphasis on building science; but there remains the urgent need to supplement this academic advance by bringing the young architect into the closest possible touch with the actual mechanics and conditions of construction on site, in view of the increasing relevance that this has for design.

[The need for bringing the young architect into the closest possible touch with construction on site was referred to the

Board of Architectural Education for consideration.]

(14) It is evident that from the client's standpoint, one of the strong attractions about an all-in service is the apparent simplicity and certainty it offers in matters of fees and costs, and the convenience to him of dealing with one agent only. The Sub-Committee are convinced that there is accordingly much to be said for the private architect, in his capacity as leader, persuading specialist consultants to join with him in offering the client one consolidated fee, thus avoiding the multiplicity of separate fees which to the client is often irritating and sometimes bewildering.

(15) Arising out of the fee question, an important issue is the use made by architects of specialist sub-contractors. Architects often accept from a structural, electrical, heating or other engineer a comprehensive scheme for a given building which includes a considerable element of tailor-made design. Yet such a scheme prepared by a specialist sub-contractor is none other than an all-in service; and it is hardly consistent to complain about the building contractor's offer of all-in service in the total sense when architects are prepared to make use of the same thing in a limited sense.

A study of the all-in service problem throws into relief and sharpens the outlines of the architect's traditional relationship with client, specialist consultant, contractor and sub-contractor, and in any reappraisal of these relationships, the specialist sub-contractor deserves close attention.

(16) A consolidated fee to accommodate the client, and a substantial rise in the technological and business efficiency of the profession, would go a very long way to meet the contractor's challenge in its present form and scope. But one is bound to ask whether there is not some inherent merit in the all-in service, as practised by firms of integrity, that is both a warning of stiffer competition to come and the herald of some new relationships destined to develop between all those who go to make a successful building.

It has not been possible to gauge with precision how widespread the all-in service now is, the volume of work handled in this way and how much further it is likely to spread. One of the contractors' architects interviewed thought his own department was very unlikely to expand; that only the really large contractors had either the resources or the prestige to run all-in services; that these were in any case likely to be limited to certain kinds of circumstances and buildings; and that any widespread development among small and even medium-sized contractors was improbable. On the evidence available the Sub-Committee are inclined to share this view.

What is beyond doubt is that the all-in service is more than a smart 'gimmick' thought up by a few contractors to catch extra trade. It clearly meets a need, or contractors would not have been approached by clients for the service as well as vice versa. It might be that for certain kinds of building the close collaboration of design, specialist and contracting elements right from the start, which is a feature of the system and is said to result in speedy erection, represents a natural and even essential development, pointing the way to a future pattern in the design and construction of major buildings. If so, it will not only be meeting the contractors' challenge, but also a forward-looking development if certain architects themselves arrange to provide all-in services no less efficient, quick and economical, but to which will be added those aesthetic and other advantages that may be expected to accrue when an independent and impartial consultant is employed. For this purpose, the architect could form an alliance with independent quantity surveyors, heating and electrical engineers and any other necessary consultants, who with a selected contractor would work as a team on a projected building from the start. Thereafter, for any new project, this loose consortium under the architect's leadership would probably consist of the same people so far as specialist consultants were concerned, but the contractor would normally change, on the important principle that the architect must be free to select the kind of construction, and hence the contractor, best suited to the job in hand. Such an arrangement would mean some increase in the number of negotiated contracts, but, since competitive tendering need not at all times and in all cases be sacrosanct, this is not an insuperable difficulty. The pressures of a free and highly competitive market can result in almost as much natural protection for the client as competitive tendering. The Sub-Committee believe a more likely limiting factor to be the number of architects willing, and with the time, to get down to the sheer business efficiency needed to make such a scheme a success.

This, however, is only one and not necessarily the best way of taking the initiative. There must be others that ought to be explored.

[It has been left to the Practice Committee and the Ad Hoc Committee on Representation of Members in Salaried Employment and Review of Structure of the Profession in collaboration to examine more closely the implications of the proposals concerning a consolidated fee for work undertaken in collaboration with specialist consultants.]

(17) **Summarising their findings, the Sub-Committee recommend:—**

(a) *That nothing be added to the R.I.B.A. Code of Professional Conduct to prevent members being employed on the staffs of building contractors.*

(b) *That the questions affecting training, fees and possible action by architects referred to in paragraphs* 12–16 *above be the subject of further and detailed consideration by the appropriate committees.*

Inquiry into the Building Timetable

AT THE REQUEST of the Ministry of Works, the Royal Institute of British Architects have carried out a small-scale inquiry into the time taken at various stages of the building programme. The object of the inquiry was to throw some light on the time likely to elapse before any change in the level of building activity, as measured by the volume of work reaching the architect, will be felt by the building contractor.

Scope of the inquiry

Architects were asked to provide details of the building timetable at a number of stages from the receipt of first instructions from the client through to the completion of building work, or the start of building work for buildings not completed. More than 50 architects were approached, in both large and small offices, in private practice, local authorities, nationalised boards and commercial and industrial firms with their own architects' departments, including a few of the larger building contractors. The timetable was provided for more than 300 building projects of different kinds—schools, housing, factories, offices, public buildings, etc.—and of different sizes in terms of building cost. The total cost of all the buildings amounted to over £64 million, equivalent to nearly 5 per cent of a year's output of new buildings.

Summary of the results

For all the buildings covered, an average period of 20 months elapsed between the receipt of the first instructions and the start of building work on the ground. However, this arithmetical mean covered a very wide range of periods, varying at the extremes from 2 months to nearly 11 years, and is therefore of limited significance. When the projects were ranged in order according to the number of months taken up to the start on the ground, the median or mid-point was 17 months, with an equal number of projects taking a longer and a shorter time. One half of all the projects fell within the range from 12 to 23 months, with one quarter taking less than 12 months and one quarter taking more than 23 months.

Table 1 shows the proportion of the total number of projects that took a given interval of time to reach the start of building on the ground, with separate figures for a number of size groups (in terms of value of contract). This shows that building had started within one year for 30 per cent of all projects covered, and within two years for 79 per cent of the projects. While there is some variation within the different size groups, the figures gave no indication of any close

TIME FROM RECEIPT OF FIRST INSTRUCTIONS TO START OF BUILDING ON THE GROUND	ALL PROJECTS IN THE INQUIRY	PROJECTS VALUED AT:— £10,000–£49,000	£50,000–£99,000	£100,000–£249,000	£250,000–£499,000
	%	%	%	%	%
Up to 3 months ..	2	2	—	2	—
4– 6 months.. ..	6	5	4	4	5
7– 9 months.. ..	10	11	8	7	17
10–12 months.. ..	12	10	21	13	5
Up to 1 *year* ..	30	28	33	26	27
13–15 months.. ..	12	12	11	14	5
16–18 months.. ..	15	11	10	23	12
19–21 months.. ..	14	13	15	13	19
22–24 months.. ..	8	11	10	6	10
Up to 2 *years* ..	79	75	79	82	73
25–30 months.. ..	8	10	4	9	7
31–36 months.. ..	6	7	9	4	5
Up to 3 *years* ..	93	92	92	95	85
37–48 months.. ..	4	2	4	4	10
Over 48 months ..	3	6	4	1	5
Number of projects covered	100% *311*	100% *83*	100% *52*	100% *91*	100% *41*

Table 1. Proportion of the total number of projects started on the ground within a given interval of time from the architect's receipt of first instructions

relationship between time taken and size of project for the range from £10,000 to £499,000. There were not sufficient examples of £500,000 or more to draw any conclusions for projects of this size. The small number of projects of under £10,000 showed a time considerably shorter than average.

Time taken at intermediate stages

The average time taken at a number of intermediate stages for all the projects included in the inquiry is given below. These figures must also be treated with caution, because not only is there a wide range of variations at each stage, but in many cases the different stages overlap. Not all the buildings included in the inquiry had actually been completed, so that the figure given for the final stage of the timetable, which represents an average of 18 months for the actual building time, is less representative than those for earlier stages.

Diagram 1 gives a simplified illustration of this. Table 4, page 352, gives similar information by size of project.

Table 2.	AVERAGE TIME FROM RECEIPT OF THE ARCHITECT'S FIRST INSTRUCTIONS
Sketch plans completed	7 months
Planning, by-law and other approvals obtained ..	14 months
Tenders out	15 months
Tenders returned	16 months
Working drawings completed	16 months
Building work started	20 months
Building work completed..	(38) months

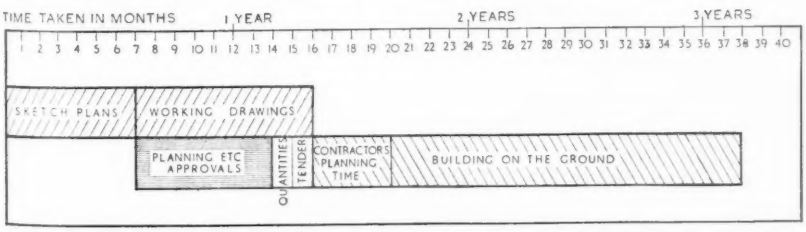

TIME TAKEN IN MONTHS
1 YEAR
2 YEARS
3 YEARS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
SKETCH PLANS
WORKING DRAWINGS
PLANNING ETC APPROVALS
QUANTITIES
TENDER
CONTRACTORS PLANNING TIME
BUILDING ON THE GROUND

Diagram 1. Timetable of Building from Architect's receipt of first instructions to completion of the building. Average for all buildings in the inquiry.

Comments submitted with many of the examples suggest that there is in fact no 'average' building—nearly every job has some peculiarity which can affect the time taken at any stage. Where causes of delay were given, these came under the following headings:—

(i) Delay in obtaining planning and other consents from local authorities, for even small projects; licensed premises requiring the approval of the local magistrate suffered particularly in this respect.

(ii) Difficulty in obtaining the necessary finance, both for public buildings (which had to be fitted into an annual programme of expenditure) and for private buildings, which were affected by the imposition of credit restrictions.

(iii) Delay in obtaining a decision from the client to go ahead; for public buildings, such as hospitals, the need to obtain the approval of the appropriate Ministry was a delaying factor.

(iv) Licensing delays, for projects started while building licences were still in force.

On the other side, the speediest examples were frequently those for which a negotiated contract was involved, where the time factor weighed more heavily than the desire for the best price that the open market would offer. In such cases the planning of the building work usually started immediately the sketch plan was completed and the working drawings were finished as the building proceeded. A number of the examples given by private architects were of this type. A similar timing pattern was shown in cases where tenders were obtained at the sketch plan stage based on approximate bills of quantities and in some of the examples provided by the building contractors, where the project was designed by the firm's own architect. (These procedures incidentally resulted in a lengthening of the average time taken for the completion of working drawings, which would otherwise be shown in the average timetable in Tables 2 and 4 as completed before the tendering stage. The effect is particularly noticeable in Table 4 for projects valued at over £1 million.) Examples were also given where the obtaining of general planning approval for the development of an area had enabled a quick start on building to be made, particularly for factory work.

A large proportion of the projects included in the inquiry were being handled during a 'boom' period for building, from late 1954 to early 1957, when there was a lot of work in the pipeline. The time taken was therefore probably longer than might be expected during a period of relative slackness of demand.

STAGE OF BUILDING TIMETABLE	AVERAGE ALL PROJECTS	PROJECTS VALUED AT:— LESS THAN £10,000–	£10,000–£49,000	£50,000–£99,000	£100,000–£249,000	£250,000–£499,000	£500,000–£1,000,000	OVER £1,000,000
	MONTHS							
From first instructions received by the architect to:—								
Completion of sketch plan ..	7	2	8	6	6	9	12	8
Planning, by-law and other approvals obtained	14	6	16	13	12	15	17	17
Completion of working drawings	16	6	16	15	15	17	21	28
Tenders out	15	8	16	14	15	14	21	19
Tenders returned	16	9	18	15	16	16	23	21
Building started on ground ..	20	10	21	19	20	21	24	28
Building completed	38	18	34	37	42	42	44	50
Number of projects covered (*a*) ..	*325*	*22*	*83*	*58*	*94*	*45*	*14*	*9*

(*a*) In a few cases building work had not started or reached completion.

Table 4. Analysis of the average number of months taken to reach certain stages of the building timetable, by value of project

Variation by type of building

The average time taken for different types of buildings from the receipt of first instructions to the start of building on the ground was as follows:—

Table 3.	MONTHS	NO. OF BUILDINGS INCLUDED
Factories and other industrial buildings	13	*43*
Housing, two-storey	16	*32*
Schools, technical colleges, universities	18	*106*
Housing, multi-storey	21	*26*
Offices and other commercial buildings	22	*41*
Public buildings (including hospitals, old people's homes, police stations, etc.)	26	*56*
Average, all buildings	20	*311*

The high average for public buildings is not unexpected as these projects are particularly subject to the delays mentioned earlier. The low average for factories is partly due to the high proportion of projects for which negotiated contracts or contracts based on rates quoted for previous buildings on the site were used. There are obviously other factors involved, such as the timing of the granting of Industrial Development Certificates, which do not emerge clearly from the limited information available, and it would be valuable to have a more detailed investigation of the difference between the average for this group and, say, the relatively high average for commercial buildings.

General conclusions

The results of this inquiry show that the period of time that may elapse between the initiation of a building project and the actual start of building may be a good deal longer than many people thought. Bearing in mind that the figures given do not include any allowance for the time taken by the client to decide to build before the architect was approached, it would appear that any measures to adjust the level of investment in buildings are liable to require at least a year to show even a small effect on the building industry and from 18 months to two years to reach their full impact. A similar broad conclusion could be drawn from a study of the rising trend in building output in 1955 and 1956 in relation to the encouragement given to investment in 1953 and 1954, culminating in the removal of licensing in November 1954. (At that time there was a pent up demand for building which needed little encouragement, a condition which does not prevail today.)

This inquiry was devised in order to give a quick answer about the average time taken at the pre-contract stage of building. It was not intended to offer any guide as to how this time might be reduced. However, the results suggest that an inquiry on a larger scale, drawing on the experience of this one, might well be worth while, to enable a more detailed analysis to be made of the various contributory factors—the type of building, its location, the client/architect/builder relationship and so forth. This is beyond the resources of the R.I.B.A., but it might perhaps be considered by the Building Research Station as a possible subject for further investigation.

Practice Notes

Edited by Charles Woodward[*A*]

IN PARLIAMENT. Agricultural Research. Farm Buildings Research Committee. Mr. Willey asked the Minister of Agriculture, Fisheries and Food, as representing the Lord President of the Council, what consultation there has been with the Royal Institute of British Architects about the work of the Farm Buildings Research Committee.

Mr. Godber: There has so far been no formal consultation with the Royal Institute of British Architects about the work of the Farm Buildings Research Committee, but two members of the Committee particularly interested in farm building design are members of the Royal Institute. When the Committee's activities reach a stage at which consultation with the Institute is likely to be of value, it will be arranged. (19 June 1958.)

LONDON COUNTY COUNCIL. Car-Parking Standards. The Town Planning Committee have been considering car-parking standards to be applied in connection with town planning applications for new buildings, extensions of buildings and, where practicable, change of use of buildings. On 2 July 1957 they reported on standards they had approved for offices and showrooms, industrial buildings and blocks of flats. The Committee now report that they have approved car-parking standards for other types of buildings (see below). In formulating all the standards the Committee realise that, in some cases, the particular circumstances of a site or the nature of the building may make it impracticable to insist on the provision of the full amount of car-parking accommodation and will deal with all such cases on their merits with the object of securing as much parking space as is reasonable in the circumstances. The developer will be free to choose what form the parking space

shall take so long as he satisfies the Council that the required number of cars can be accommodated reasonably. The standards will be reviewed within the next three years in the light of experience.

Pamphlets giving information about the Council's planning standards are being prepared and will be made available as soon as possible to members of the public and interested bodies; the car-parking code will be the subject of the first of these pamphlets.

Commercial buildings. One lorry space of 500 sq. ft. for every 5,000 sq. ft. of gross floor space with a minimum requirement of one lorry space and a maximum of 75 per cent of the site area. To permit maximum freedom in internal design a single standard covers loading, unloading and waiting space and no additional loading and unloading space is required.

Residential buildings. (i) For *houses*, which are being erected individually or in terraces or other groups, the Council will, except in special circumstances, require a garage or car space to be provided for each house. *In comprehensive schemes*, including flats, houses and maisonettes, the standard already approved for flats (namely, one car space to every two lettable units in the 200-persons-an-acre residential zone, and one car space to every four units elsewhere) will be applied to all dwellings within the scheme.

(ii) *Hotels, residential clubs and hostels*, except as provided below—One car space for every five bedrooms, but additional parking may be required in hotels if ballrooms, banqueting halls, etc., are let frequently for separate functions.

(iii) *Homes and hostels and similar buildings provided by public authorities and private organisations and for students' hostels and nurses' homes*—One car space for every twenty occupants.

Shopping. (i) *Departmental stores and large retail establishments*—One car space for every 2,500 sq. ft. of gross floor space. This standard should be used mainly for premises in the central area. Parking provision for district and local shopping centres should, normally, be made in public car parks.

(ii) *Small shops*—Parking provision will not be required except where the shops form part of a larger scheme. In that case, the need will be considered on its merits.

Cinemas. One car space for every 60 seats.

Theatres and concert halls. Applications will be considered on the basis of one car space for every 30 seats.

In applying the standards for cinemas, theatres, and concert halls regard must also be paid to the provisions of the London Building Acts, particularly as regards high fire risk, and also to the Council's regulations concerning places of public entertainment, special attention being paid to the public safety aspect of car parking. Where theatres are included in buildings with other uses, full parking provision for the other uses will be required.

Restaurants. In view of the limited experience in applying parking standards for restaurants, applications will be dealt with according to individual circumstances. (Where a small café or restaurant forms part of a shopping frontage it will be treated as a small shop. For a large restaurant the following points will be considered:—the hours when the restaurant is open; in areas where parking meters are likely to be introduced, whether clients are likely to stay for less than two hours, in which case they can use street parking facilities; and traffic conditions in the surrounding streets.)

Special buildings. This class comprises a variety of buildings, with miscellaneous uses which do not fit conveniently into other categories, e.g., churches, hospitals and town halls. It includes buildings with a steady demand for parking and others with a normally small parking demand and occasional peak demands.

The standards will be calculated as follows: (i) One car space for every 2,500 sq. ft. of floor space used only by staff. (ii) Space for all service vehicles kept regularly on the site. (iii) One car space for every 40 visitors expected at the peak time of a normal day or at occasional peaks and for whom public car-parking space is not likely to be provided; where occasional peak demands are high the practicability of provision on the site will be borne in mind and also the degree to which car-parking can safely be allowed in surrounding streets.

Construction of Buildings in London—Open-sided Garages. The Council's recent publication, *Construction of Buildings in London* included its principles for the guidance of applicants in respect of buildings of excess height and/or additional cubical content requiring approval under Section 20 of the London Building Acts (Amendment) Act, 1939. A further appendix to these principles is now issued as follows:—

> *Open-sided garages on sites with satisfactory access for fire-fighting, subject to control under Section 20 of the London Building Acts (Amendment) Act, 1939, and the Petroleum (Regulation) Acts, 1928 and 1936.*
>
> Where the structure can be erected a safe distance from adjoining property, or where a satisfactory standard of separation can be achieved between the structure and adjoining property the relevant principles concerning enclosed garages may be relaxed and sprinkler installations, separations across large floor areas and, in certain cases, between storeys, and mechanical ventilation above ground level may be omitted. Each scheme submitted will be examined with a view to economy in structural and other fire precautions.

The object of the Council's decision is to enable multi-storey garages to be constructed as economically as possible, consistent with safety; open-sided garages would have advantages from these aspects and could thus contribute to easing the parking problem.

LAW CASE

Building Contract: R.I.B.A. Form: Liability of Contractor to Insure. Gold v. Patman & Fotheringham Ltd. The defendants, a firm of building contractors, contracted to erect a building on a site owned by the plaintiff. The contract was in the standard R.I.B.A. form, and the schedule of conditions provided by condition 14(*b*) that the contractor should be liable for and should indemnify the employer against any loss, liability, claim or proceedings, in respect of any injury or damage whatsoever to any property, real or personal, arising out of or in the course of the execution of the works, provided that the same was due to any negligence of the contractor. By condition 15: 'Without prejudice to his liability to indemnify the employer under cl. 14 hereof, the contractor shall effect . . . such insurance . . . as may be specifically required by the bills of quantities . . .' In the bills of quantities it was provided that the contractor should insure or make payments in connection with, *inter alia*, National Insurance Acts, Fatal Accidents Acts, and insurance of adjoining properties against subsidence or collapse. In carrying out piling work on the instruction of the plaintiff or his architect the defendants (admittedly without negligence) caused damage by subsidence to adjoining properties, the owners of which issued claims against the plaintiff, who brought the present action against the defendants claiming damages for breach of contract on the ground that the defendants had only covered their own liability by insurance and not also that of the plaintiff. Gorman J., allowed the plaintiff's claim, and the defendants appealed.

Hodson, L. J., delivering the judgment of the court, said that since the earlier items mentioned in the bills of quantities would be for the contractor to cover there was no sufficient reason for thinking that when one came to the last item, 'Insurance of adjoining properties against subsidence or collapse', the obligation to insure was for the first time in the list an obligation to insure, not the contractor himself, but the owner. If there were to be a change of obligation, one would expect some words used to show that there was a change, and here there were none; nor would one expect to find such an obligation in this place, having regard to the words of condition 15, where reference was made to the insurances to be effected as might be specifically required by the bill of quantities, such policies to be produced when required and not only to be approved by and deposited with the architect. Accordingly, the defendants were right in their contention that the obligation to insure adjoining properties against subsidence or collapse was for the contractor to insure himself and not the owner. Appeal allowed. (THE SOLICITORS' JOURNAL, 28 June 1958.)

Review of Films

The review covers only a few of the films seen. A complete list is available from the R.I.B.A. Public Relations Department.

The country of origin and date of release are given first. The film is in monochrome unless otherwise stated. The sizes (35 mm. and 16 mm.) are given. Sound films are marked 'sd', and silent 'si'. The running time is given in minutes.

(F) *indicates free distribution.*
(H) *indicates that a hiring fee is payable.*

Highways for Tomorrow
Britain 1955 (F)

Summary: The film shows various scenes of heavy traffic on congested roads and illustrates the delays and accidents caused by such conditions. Some examples of road planning carried out on the Continent since 1945 are shown.

Appraisal: An excellently produced, interesting and persuasive propaganda film to draw attention to the need for improved roads and a new road system. The criticism is somewhat overstated and no real solution is put forward. The photography and editing are very good and the shots well selected. Of interest to general audiences and also to highway engineers although of little technical significance.

16/35 sd., 14 min. From Esso Petroleum Company Ltd., 101–4 Piccadilly, London, W.1.

Keeping Houses Warm
Britain 1957 (F)

Summary: The film, made by the Building Research Station, considers how by insulation, controlled ventilation and heating houses may be kept warm economically.

Appraisal: A film made to inform general audiences, which makes its points well. It treats a complex subject clearly and explicitly and holds interest. Less time might have been given to some rather obvious items and more to the planning problems which are of greater importance than the film suggests. It is a pity that better architectural examples could not have been found to illustrate the points made. Recommended for general audiences, architectural students (elementary) and building students.

16 sd., 30 min. From Film Library, Ministry of Works, Lambeth Bridge House, London, S.E.1.

Aluminium on the Skyline
U.S.A. 1951–52 (F)

Summary: The film shows at various stages the construction of the 30-storey skyscraper headquarters of the Aluminium Company of America in Pittsburgh. Details are given of the extensive use of aluminium both inside and outside—in cladding, windows, doors, blinds, electrical conductors, plumbing and air-conditioning.

Appraisal: A first-rate and competent film to advertise the possibilities of aluminium as a building material, but although the factual content is adequate it has little teaching value. The presentation of the film is good although the commentary is over-emphatic and too fast. The film is of good cinematic quality although the colour values are poor and the music tends to be obtrusive. Of interest to the building industry, architectural students and general audiences.

16 sd. colour, 28 min. From Aluminium Development Association, 33 Grosvenor Street, London, W.1.

A Communications Primer
U.S.A. 1954 (H)

Summary: By a combination of animated cartoon and live action the film concerns itself with focusing attention on the technique of communicating ideas so that they may be understood by others.

Appraisal: A fascinating and clever film that both instructs and entertains. The presentation is clear and the exposition stimulating. It is in itself an excellent piece of communication both visually and in sound. Recommended for schools (post G.C.E.), architectural students and general architectural audiences. Of interest to any intelligent adult audience.

16 sd. colour, 20 min. From British Film Institute, 24 Denmark Street, London, W.C.1, or G.B. Film Library, Aintree Road, Perivale, Middlesex.

Pre-Stressed Arch Construction
Britain 1955 (H)

Summary: The film shows the various stages in the building of an ammonia store using large span prestressed concrete arches —mixing the concrete, casting the rib, erecting the rib, roofing and finishing.

Appraisal: A good factual film showing an experimental construction process. The commentary is in the main good: the sequence and close-ups are perhaps a little rapid and a summary would have been useful. Better use might have been made of diagrams. The photography and colour are good but the music is unnecessary. Of interest to architectural and building students.

16 sd. colour, 26 min. From Central Film Library, Government Building, Bromyard Avenue, London, W.3.

A Geometry Lesson
Italy 1949 (H)

Summary: An essay on the relationship between mathematics and art. The film is produced by Carlo Ponti and directed by Virgilio Sabel.

Appraisal: Visually interesting, the film attempts to demonstrate the mathematical nature of natural forms and the beauty and symmetry of many geometric shapes. The photography is excellent and the tempo and balance good. The commentary spoken in English by an Italian is difficult to hear and the music is too insistent and out of character. Of interest to architects, art and architectural students.

16 sd., 12 min. From British Film Institute, 24 Denmark Street, London, W.C.1.

The Stained Glass at Fairford
Britain 1956 (H)

Summary: A film about the 16th-century stained-glass windows at St. Mary's at Fairford, Gloucestershire. Opening with views of the exterior the film explores in detail the windows which follow the story of the Bible from the Garden of Eden to the Day of Judgment as designed by the medieval artists. Background information is given by John Betjeman and relevant passages from the Bible are read by Robert Donat.

Appraisal: An interesting film to record and illustrate the magnificent stained glass. The film shows the details of some of the windows but at the expense of the general effect of the glass in the interior of the church. More factual information about 16th-century glass would be an advantage. The colour although good hardly portrays the brilliance of the original glass. The film is rather long and the music although not inappropriate is not necessary. Recommended for art and architectural students and of interest also to architects and general audiences.

16 sd. colour, 26 min. From British Film Institute, 24 Denmark Street, London, W.C.1.

Correspondence

A.B.S. OLD PEOPLE'S HOMES

The Editor, R.I.B.A. Journal

Dear Sir,—The completion of the first part of this scheme* is the result of the Centenary Appeal which was first launched eight years ago. There are enormous demands for accommodation and it is the earnest wish of the Trustees to carry on with the whole scheme and to complete the project. Stage 2, which would provide a further six houses, requires another £15,000.

May we appeal through you to the profession to help raise this sum—£1 from every member on the Register would give us the total cost and the year's running expenses. Surely this is not too much to ask?

Yours faithfully,
BASIL SPENCE [*F*],
President,
HOWARD LOBB [*F*],
Hon. Secretary,
Architects' Benevolent Society.

THE LATE GREY WORNUM

Sir,—I would be most grateful for any letters, anecdotes, or reminiscences from friends and co-workers of Grey Wornum, C.B.E. [*F*], to help complete his biography on which I am working. I am especially interested in the years 1914–1923.

Any material should be sent to me care of the Secretary, Royal Institute of British Architects, 66 Portland Place, London, W.1.

Yours truly,
MIRIAM WORNUM

* Frenchlands Hatch was opened on 25 June and a photograph was reproduced on the cover of the July JOURNAL.

Notes and Notices

NOTICES

Election Void. Under the provisions of Bye-law 17, the election as Associate of the following has been declared void: Miss Jennifer Rosemary Tyler.

The R.I.B.A. Appointments Department. Members and Students of the R.I.B.A. and the Allied Societies are reminded that the services of the Institute's Appointments Department are available to employers requiring assistants and to assistants seeking salaried employment.

Employers are invited to notify the Secretary of vacancies in their offices, giving details of the work to be done, the qualifications required and salaries offered.

Assistants should preferably call at the offices of the Appointments Department, but if this is not practicable they should obtain from the Secretary an application form, which when completed and returned to the Institute will enable the Department either to send the applicants particulars of vacancies suitable to their qualifications and requirements or submit their names for vacant posts.

Members and Students seeking official appointments should note that normally these are fully advertised in the weekly professional press, and that therefore the Appointments Department do not as a rule notify them to those on the register.

The Institute will also be glad to advise on most matters concerning architectural employment, including overseas appointments.

Shape and Sizes of Technical Literature. Postcards for use by members asking manufacturers to produce technical literature in accordance with B.S. 1311: 1955 are available from the Secretary, R.I.B.A., on application, free.

CURRENT R.I.B.A. PUBLICATIONS

The following is a list of the main R.I.B.A. publications with their prices.

Agreement, Forms of

Form of Agreement for General Use between a Private Building Owner and an Architect or a Firm of Architects.

Form of Agreement for General Use between a Building Owner (being a Statutory Authority) and an Architect or a Firm of Architects.

Form of Agreement between a Local Authority and a Firm of Architects for Housing Work.

Form of Agreement between a Local Authority and a Firm of Architects for Multi-Storey Flats.

Form of Agreement between the Promoters and a Firm of Architects appointed as the Result of a Competition.

Price 6*d*. per form (inclusive of purchase tax). Postage 4½*d*.

Architect and His Work, The
Price 6*d*. Postage 4½*d*.

Before You Build. Free

Certificates, Architects', Form Prepared by the Practice Committee

Copyright Book of 100 Certificates.
Price 17*s*. (inclusive of purchase tax). Postage 1*s*. 6*d*.

Conditions of Engagement and Scale of Professional Charges

Price 6*d*. Postage 3*d*.

Contract, Form of Agreement and Schedule of Conditions

For use with quantities: 1939 revised 1957. Copyright.

For use without quantities: 1939 revised 1957. Copyright.
Price 2*s*. 2*d*. per form (inclusive of purchase tax). Postage 6*d*.

Adapted for the use of Local Authorities, for use with quantities: 1939 revised 1957. Copyright.

Adapted for the use of Local Authorities, for use without quantities: 1939 revised 1957. Copyright.
Price 2*s*. 5½*d*. per form (inclusive of purchase tax). Postage 6*d*.

Fixed Fee Form of Prime Cost Contract for use in the repair of war-damaged property: 1946 revised 1956. Copyright.
Price 2*s*. 2*d*. (inclusive of purchase tax). Postage 6*d*.

Cost Plus Percentage Form of Prime Cost Contract for use in the repair of war-damaged property: 1946 revised 1956. Copyright.
Price 2*s*. 2*d*. (inclusive of purchase tax). Postage 6*d*.

Examination, Intermediate, Questions Set At

Price 1*s*. per examination. Postage 4½*d*.

Examination, Professional Practice, Questions Set At

Price 6*d*. per examination. Postage 3*d*.

Examinations, Final and Special Final, Questions Set At

Price 1*s*. per examination. Postage 4½*d*.

Forms of Articles of Pupilage

Copyright. Price 1*s*. 8*d*. (inclusive of purchase tax). Postage 3*d*.

Membership of the R.I.B.A.

Particulars of the Qualifications for Associateship.
Price 2*s*. 6*d*. Postage 6*d*.

Party Wall Notice Forms, for Use Under the London Building Act

Form A—Party Structures.

Form B—Party Fence Walls.

Form C—Intention to Build within Ten Feet and at a lower level than the bottom of the foundations of adjoining Owner's Building.

Form D—Intention to build within Twenty Feet of the adjoining Owner's Independent Building and to a depth as defined in Section 50(1)(*b*).

Form E—Party Walls and Party Fence Walls on line of Junction of adjoining lands.

Form F—Walls or Fence Walls on Building Owner's land with footings and foundations projecting into adjoining Owner's land.

Form G—Selection of Third Surveyor.
Price 7*d*. per form (inclusive of purchase tax): Postage 3*d*.

Prizes and Studentships (Pamphlet)
Price 3*s*. Postage 6*d*.

Tender, Form of, for use by Nominated Suppliers
Price 2*d*. per form. Postage 3*s*. 2*d*. per dozen (post free).

COMPETITIONS

Wokingham County Infants' School. The Berkshire County Council invite architects registered under the Architects (Registration) Acts to submit in competition designs for a new County Infants' School to be erected at Wokingham.

Assessors: Mr. E. D. Lyons [*A*], Mr. J. T. Castle, A.M.T.P.I. [*A*] (County Architect), Mr. T. D. W. Whitfield, M.A., LL.B., (Director of Education).

Premiums: £300, £175, £75.

Last day for questions: 8 September 1958.

Last day for submitting designs: 15 December 1958.

Conditions may be obtained from the Clerk of the Berkshire County Council, Shire Hall, Reading. Deposit £2 2s.

Civic Centre, Ipswich. Last date for submitting designs in the preliminary stage: 25 August 1958.

Full particulars were published in the JOURNAL for March, page 173.

Design of Wooden Office Furniture. Last date for submitting designs in the first stage: 29 August 1958.

Full particulars were published in the JOURNAL for March, page 173.

International Competition. A note has been received from the International Union of Architects that the conditions of the following competition have been approved by them:

Monument to Jose Batlle, Montevideo (Uruguay). Last day for submitting designs is 15 December for competitors living in Uruguay, Argentina, Brazil and Paraguay, and for competitors elsewhere, 30 December 1958.

Full particulars were published in the JOURNAL for July, page 323.

COMPETITION RESULT

Redevelopment of Berlin Centre

1st Prize:
Friedrich Spengelin, Fritz Eggeling and Gerd Pempelfort (Hamburg and Hanover).

2nd Prizes:
1. Egon Hartmann (Mainz-Gonsenheim) and Walter Nickerl (Gelsenkirchen) with Karl Worf, M. Grossmann, Karl-Heinz Klein, Friedrich Lehnhoff, Walter Horn and Werner Schmidt.
2. Hans Scharoun, with Wils Ebert (Berlin).

3rd Prizes:
1. Gerhard F. Kern, Rainer G. Rümmler and Hans J. Schröter (Berlin).
2. Bodo Fleischer and Hermann Kreidt with Fritz Kreidt (Berlin).
3. Alison and Peter Smithson and Peter Sigmond-Wonke (London).

Purchases:
1. Lisindo Baldassini, Luigi Bicocchi, Marisa Conti, Sergio Conti, Luciano Grassi and Roberto Monsani (Florence).
2. Marion Tournon-Branly, Pierre Devinoy, Jean Faugeron and Bernard de La Tour d'Auvergne with Wolfram Schlote (Paris).
3. Arbeitsgruppe 4 Wilhelm Holzbauer (Vienna).
4. Wolfgang Rasper and Horst Kolster (Berlin).

ALLIED SOCIETIES

Changes of Officers and Addresses

Hampshire and Isle of Wight Architectural Association. President, Frank R. Greenen, A.M.T.P.I. [*A*]. *Central Chapter*. Chairman, A. A. Haggar, M.B.E., J.P. [*A*]. *Western Chapter*. Chairman, P. D. Tugwell [*A*].

Liverpool Architectural Society. Hon. Secretary,

Harry Banister [*F*], 64 Rodney Street, Liverpool, 1.

Suffolk Association of Architects. R.I.B.A. Architecture Bronze Medal. Nomination forms and conditions, etc., with regard to the above award for buildings completed in the county of Suffolk (both east and west) during the three years ending 31 December 1957 are obtainable from the Hon. Secretary, Mr. L. J. Grigg [*A*], County Architect's Dept., County Hall, Ipswich, Suffolk.

The last day for submission of nomination forms with photographs and/or drawings is noon, Monday, 1 September, 1958.

GENERAL NOTES

The Victorian Society. A statement issued from the offices of the Society for the Protection of Ancient Buildings, 55 Great Ormond Street, London, W.C.1, appealing for donations and subscriptions to the recently formed Victorian Society includes the following information. (This is also referred to in an editorial note.)

The objects of the Society will be the study and appreciation of Victorian architecture and associated arts with a view to the preservation of outstanding examples. Such study is an essential step towards discrimination between the thousands of buildings and other products of the Victorian and Edwardian ages. By no means all these are worthy of preservation but some of them are great works of art and some of them are landmarks in our architectural and artistic history. Almost all are insufficiently appreciated at present and for this reason are in danger of neglect and destruction.

The Victorian Society hopes to stimulate appreciation and encourage research by means of lectures, exhibitions and privileged visits which will make known the names and achievements of architects and craftsmen between 1837 and 1914. The latter date has been chosen because it represents the end of an era which did not terminate with the century. It is hoped that the organisation will comprise subcommittees, covering in addition to buildings and the fine arts such specialised aspects as furniture, decoration, ceramics, glass, textiles, metalwork and cast iron. It is also hoped that there will be regional groups.

The categories of membership are as follows: Founder-benefactor (including corporate membership in the case of organisations): £100. Founder member: £25. Life member: £15 15*s*. Member: £1 1*s*. (minimum annual subscription).

All communications should be addressed to the S.P.A.B.

A.A. School of Architecture. Course in Tropical Architecture. Reference is made in an editorial note to a six-month course in tropical architecture which is being held at the A.A. School. The fee for the course is £120 and studentships have been donated by the following firms: Yorkshire Imperial Metals Ltd.—two of £50; John Laing and Sons Ltd.—two of £50; and Crittall Manufacturing Co. Ltd.—one of £50. Applicants for these should write to the Principal, 36 Bedford Square, London, W.C.1, before Tuesday 26 August 1958.

The fee for the lecture course only, which is being held on Mondays, Wednesdays and Fridays at 5 p.m., is £12 10s. per term. Full details are obtainable from the A.A. School.

Eastern Federation of Building Trades Employers. Residential Course for Management Students. The Eastern Federation is holding a residential course for management students at Wansfell College, Theydon Bois, Essex, from Monday 29 September to Friday 3 October 1958.

The course, which has the full support of the Eastern Counties Joint Consultative Board of Architects, Quantity Surveyors and Builders, is designed to provide an introduction to some of the management problems in the building industry. Lectures will be based on the needs of building management trainees and students preparing for their professional examinations (R.I.B.A. and R.I.C.S.) and discussion groups will be concerned with common problems. There is no specific age limit but it is anticipated that members of the course will generally be between 18 and 25; and the course will not necessarily be confined to professional students from the eastern counties.

Among the papers will be 'The Structure of the Building Industry', by E. J. Cook, Junior Vice-President, L.M.B.A., 'The Principles of Management', by D. E. Woodbine Parish, Junior Vice-President, N.F.B.T.E., 'Current Economic Problems', by D. Raymond, Assistant Secretary, University of Cambridge Board of Extra-Mural Studies, 'Industrial Relations', by R. W. Porter, Director, E.F.B.T.E., 'The R.I.B.A. Standard Form of Contract', by M. Chavasse, Barrister-at-Law, 'The Architect and the Quantity Surveyor', by H. Conolly [*F*], County Architect, Essex, 'Managing a Building Contract', by R. F. Mansell, Junior Vice-President, L.M.B.A., and 'How Building Research can help the Building Industry', by H. J. Eldridge of the B.R.S.

There will be 28 places and the inclusive fee will be limited to £5. Details and booking forms are obtainable from the Director, E.F.B.T.E., 95 Tenison Road, Cambridge.

Notes from the Minutes of the Council

MEETING HELD ON 8 JULY 1958

New Members and Retired Members of Council. The President extended a welcome to the new members of Council, and on his proposition a vote of appreciation of the services of those members who had retired since the last meeting was passed unanimously.

Appointment of R.I.B.A. Representatives

(*a*) *L.C.C. Technical College for the Furnishing Trades: Governing Body*. D. W. Pye [*A*] re-nominated for a further three-year term from 1.9.58.

(*b*) *L.C.C. Brixton School of Building: Governing Body*. Philip Bennett [*F*] re-nominated for a further three-year term from 1.9.58.

(*c*) *L.C.C. Hammersmith College of Art and Building: Governing Body*. T. B. Harper Ellis [*A*] re-nominated for a further three-year term from 1.9.58.

(*d*) *L.C.C. Camberwell School of Arts and Crafts: Governing Body*. Ernest Seel [*F*] re-nominated for a further three-year term from 1.9.58.

(*e*) *B.S.I. Committees*. (i) *TIB*/15: *Standard Clauses in Timber Specifications*. George Newell [*A*] and R. T. Walters [*A*]. (ii) *CEB*/6/5: *Concrete Transmission Poles*. David Cole [*A*]. (iii) *Tubular Steel Columns for Street Lighting*. David Cole [*A*].

Membership. The following members were elected: as Honorary Associate 1; as Fellows 8; as Associates 183.

Students. 154 Probationers were elected as Students.

Applications for Election. Applications for election were approved as follows: *Election 7 October* 1958: as Fellows 6; as Associates 51. *Election 4 November* 1958 (*Overseas Candidates*): as Fellows 3; as Associates 7.

Application for Reinstatement. The following application was approved: as Associate: Mrs. Roma Austral Smith.

Resignations. The following resignations were accepted with regret: Mrs. Elizabeth Mary Hare [*A*], Stanley Frederick Kirk [*A*], Mrs. Marjorie Ling [*A*], Mrs. Margaret Marsh [*A*], Mrs. Hilary Agnes Oberlander [*A*], George Edward Phillips [*A*], Mrs. Joan Marian Sudbury [*A*], Walter Welsh Forsythe [*L*], Ernest Arthur Hayward Shaw [*L*]. *As from* 1 *July:* Herbert Bernard Horrell [*A*], Benjamin Browne Fairbank [*L*].

Applications for Transfer to Retired Members' Class under Bye-law 15. The following applications were approved: as Retired Fellow: George Henry Davies. As Retired Associate: Ralph Windsor Thorp. As Retired Licentiate: Frederick William Elliott Vanstone.

Obituary. The Secretary reported with regret the death of the following members: Dr. Wells Wintemute Coates, O.B.E. [*F*], George Crossley [*Retd. F*], Charlie Castelow [*A*], Albert S. Macduff [*A*], Arthur Henry Chapman, M.B.E. [*L*], William Ernest Litchfield [*L*], Arthur William Painter [*L*], Gilbert Harold Alfred Perriam [*L*], James William Crawford [*Retd. L*], Guy Leresche [*Retd. L*], Cecil Goldsworthy [*Student*], Miss Yuet Kwan May Li [*Student*].

By resolution of the Council the sympathy and condolences of the Royal Institute have been conveyed to their relatives.

R.S.A. Bicentenary Medal 1958. The Council of the Royal Society of Arts have awarded their bicentenary medal for 1958 to Mr. John Gloag [*Hon. A*].

Society of Architectural Historians, Great Britain. Annual General Meeting. The first annual general meeting is to take place at the Society's headquarters, the York Institute of Architectural Study, on 30 and 31 August.

On the Saturday, following a business meeting, Professor Geoffrey Webb [*Hon. A*] is to address the Society and in the evening a dinner will be held in the Merchant Taylors' Hall. On the Sunday the following lecture-seminars have been arranged: 'Architecture and Technology: the development of the domestic window', by John Gloag [*Hon. A*], 'The early work of Gaudi', by Henry-Russell Hitchcock [*H.C.M.*, United States], 'A problem of the Italian Renaissance', by Dr. S. Lang, and 'The Aesthetic Theory of Robert Adam', by Dr. Peter Murray.

The first volume of the Society's annual journal, ARCHITECTURAL HISTORY, will be available shortly.

Anyone interested in obtaining further details of the Society's activities should write to the Acting Honorary Secretary, Frank I. Jenkins [*A*], at the School of Architecture, University of Manchester, Manchester, 13.

Town Planning Institute. New President. Mr. U. Aylmer Coates [*F*] has been elected President of the Town Planning Institute for 1958–59. Mr. Coates is the County Planning Officer for Lancashire.

Obituaries

John Tallents Wynyard Brooke [*Retd. F*] died on 3 April 1958, aged 79.

His son, Mr. J. R. P. Brooke [*A*] writes:

'Mr. Brooke was educated at Haileybury College, and served his apprenticeship in the office of his father, Mr. J. Brooke [*F*] of Manchester. After a period in practice there he emigrated to Shanghai in 1907, in which city he spent the remainder of his professional life.

'His firm, Davies and Brooke—later Davies, Brooke and Gran—was responsible for many large projects in Shanghai and elsewhere in China, including hotels, theatres, clubs, hospitals, office and bank buildings, factories and domestic work. Mr. Brooke showed great ingenuity in devising foundations for multi-storied buildings in the swamp ground on which Shanghai is built, and his work contributed much to making Shanghai the fine city it was in the 1920's and 30's.

'For some years he edited the *China Architects and Builders Compendium*, and served on the Land Commission of the Shanghai Municipal Council.

'During the latter years of the Second World War Mr. Brooke was interned by the Japanese, and subsequent conditions in Shanghai made it impossible—to his great regret—to continue in practice there. His last years were spent in retirement in Surrey.'

Mr. Wells Wintemute Coates, O.B.E., R.D.I., Ph.D.(Lond.); B.A., B.Sc. (British Columbia) [*F*], died in June 1958, aged 62.

Mr. Raymond McGrath [*F*] writes:

'The early death of Wells Wintemute Coates has deprived modern architecture of one of its pioneers in England. Born in Tokio in 1895, and educated in Canada, he came to London University as a research student of engineering in 1924. He took his Ph.D. degree there. He was in private practice as an architect in London from 1929–39.

'In the formative period of architecture in the early thirties, Wells Coates made a significant contribution. At a time when English architecture has been described as "broadly Renaissance, inclining to Classic according to the taste of the architect",Wells Coates brought a well-trained mind and natural good taste to bear upon the problems of design and it was then something rare to see an architect paring away the stylistic details and frankly exploiting simplicity. He was keenly interested in the influences which were at work on painting, sculpture and architecture and, with Paul Nash, was one of that little band of early crusaders which formed Unit One. A little later, in 1933, he was largely responsible for the foundation of the MARS (Modern Architectural Research) Group, which was to make its mark upon the younger generation of architects.

'In 1930–32, when the British Broadcasting Corporation selected a small group of architects to design and equip contemporary studio interiors for Broadcasting House, I was associated with Wells Coates in this work. He designed the Dramatic Control Room, News Studios and the Dramatic Effects and Gramophone Effects Studios. I regard these as the most significant features of the Broadcasting House experiment.

'The equipment and fittings which he designed for these studios still deserve study and were a foretaste of things to come. Such work awakened interest in industrial design and when later, in 1934, he was commissioned to design a moulded plastic radio cabinet for E. K. Cole Ltd., it rapidly became "the most famous set in British Radio". Those who do not remember it will find it illustrated in Michael Farr's *Design in British Industry* (1955) along with other excellent designs for a portable and a television-radio for the same firm. Later he turned his attention to other types of equipment and eventually, with original results, to the design of small sailing-boats.

'His architectural output during the thirties was not great. It included the notable (to some notorious) Lawn Road (or Isokon) Flats—an essay in the economy of space; other flats in Kensington and Brighton; laboratories for Ekco; and shops and houses. It was not an easy period in which to practise modern architecture in England and his work had often a sort of puritan logic about it which did nothing to ingratiate it to the public.

'The war interrupted his practice. He had been a fighter-pilot in the First World War. In the second he rose to the rank of Wing Commander and was appointed an O.B.E. When he resumed his practice his most important work was the Telecinema for the South Bank exhibition of 1951. For some years afterwards his practice was carried on as Wells-Coates, Jacqueline Tyrwhitt and Associates, and he was chiefly engaged on town planning projects. In 1956 he moved to Vancouver where the promise of his career, on that side of the Atlantic, has now been cut short.

'My own recollection of Wells Coates is of his great personal assurance, an assurance which some regarded as conceit. He was good humoured, but also 'touchy' and his friendship was elusive. He was an admirable host. He had great physical vigour and there was a very gay side to his fundamentally serious nature. His conversation was informed and precise, his opinions sincerely expressed. One also remembers his chuckling, happy laugh, but I do not think he enjoyed great personal happiness. Material success seems also to have eluded him, but there can be no doubt that architecture has lost an outstanding personality, as well as a genuine leader.

'In an early manifesto for Unit One he wrote: "The Tradition of Architecture is to seek the order that leads to freedom and fullness of life. Architecture has to serve the purposes of the people as well as the purposes of beauty." His own work was a search for these principles.'

Professor Adolf Rading, M.T.P.I. [*F*], died on 20 April 1957, aged 69.

Professor Rading was a graduate of the Municipal School of Architecture, City of Berlin, and received his training as assistant to Professor Peter Behrens, Professor August Endell and Professor Albert Gessner. In 1912 he commenced private practice and was subsequently in partnership with Professor Endell in Breslau.

From 1919–23 Professor Rading was a teacher in the State Academy of Arts, Breslau, and Professor of Architecture there from 1923–33. During that time his principal architectural works included the winning of the competition for 'A Greater Breslau' in 1922; the Oddfellows Lodge, conversions and new building of the Mohren-Apotheke, the Werkbund Housing Estate, and private houses, all at Breslau; the railway station building at Schoenberg-Oberlausitz; and a housing estate in Berlin-Lichtenberg. In 1932 he was commissioned by the Deutscher Werkbund as Adviser for Technical Education in Prussia to the Ministry of Education.

In 1933 he left Germany under protest and after working in France he went to Haifa, Israel, in 1936. From 1943–50 Professor Rading was in the service of the Municipal Corporation of Haifa, first as Architect Consultant, then as Municipal Architectural and Town Planning Adviser and Acting City Architect. His private commissions included private houses, business premises and a luxury hotel, while in his official capacity he was responsible for the town planning and redevelopment of Haifa.

He came to London in 1951, where he was still practising at the time of his death in partnership with Mr. F. H. Herrmann [*F*], who is continuing the practice.

Professor Rading wrote many articles for periodicals including WERKBUND, FORM, DER STÄDTEBAU and THE STUDIO, and contributed to *Probleme des Bauens* and several other books on architectural subjects.

John Burgess Surman [*F*] died on 6 February 1958 aged 73.

Mr. Surman was born in Edgbaston, the second son of the late J. S. Surman whose family had been connected with the building trade in Birmingham for over 100 years. He was educated at Bromsgrove School and before commencing his articles with Messrs. C. Whitwell and Son of Birmingham, he spent some time in his father's workshops.

During his apprenticeship Mr. Surman studied at the Birmingham School of Art. From 1912–26 he was a lecturer at the Birmingham School of Architecture and then for six years was Deputy Director there. Because of his growing private practice Mr. Surman relinquished this position, but retained his interest in the School as member of the School of Art Sub-Committee of the Education Committee.

Mr. Surman was in partnership before the war, with Mr. W. T. Benslyn [*F*] and subsequently with Mr. Geoffrey Scott Kelly [*F*] and his son, Mr. John Leslie Silvester Surman [*A*] under the style of Surman, Kelly and Surman.

The practice was a varied one and Mr. Surman was responsible for a wide range of buildings including banks, churches, schools, commercial and industrial premises and domestic architecture and more particularly Ward End Elementary School, Birmingham, and the restoration of St. Paul's Church, St. Paul's Square, Birmingham.

In partnership with Mr. Benslyn he won the competition for the West Bromwich Building Society's new premises at West Bromwich in 1928.

During the First World War he had been invalided from military service and served in the Special Constabulary in the Second World War.

Mr. Surman was a past member of the R.I.B.A. Council and a past-President of the Birmingham and Five Counties Architectural Association and had represented that body on the Allied Societies' Conference.

Mr. G. S. Kelly writes:

'John B. Surman will be sorely missed by a multitude of friends both within and outside the profession.

'His unfailing example of professional and personal integrity was a constant inspiration to all who had the privilege of his acquaintance, and his readiness to help to the utmost anyone who sought his aid will not be forgotten by those who, either in their student or later days, went to him for advice. Advice which they knew would not only be based on the wide comprehension of a cultured and artistic personality, but also tempered by good humour and reinforced by the keen perception of a mind that, right to the last, retained a firm mastery of the complexities of contemporary practice.'

Membership Lists

ELECTION: 8 JULY 1958

The following candidates for membership were elected on 8 July 1958.

AS HON. ASSOCIATE (1)

Solly: (Miss) Beatrice Norbury.

AS FELLOWS (8)

Charles: Frederick William Bolton, B.Arch. (L'pool) [*A* 1937], Bromsgrove.
Harris: John Robert, A.A.Dipl. [*A* 1949].
Johnston: Arthur Robert Court, B.Arch. (L'pool) [*A* 1950], Carlisle.
Matthew: Henry Douglas, M.B.E., M.C., D.A.(Edin.) [*A* 1948], Buckhurst Hill.
Newcombe: Vernon Zunz, M.T.P.I. [*A* 1947], Kuala Lumpur, Malaya.
Oliver: Charles John [*A* 1950], Maidenhead.
Power: Alan John [*A* 1948], Buckhurst Hill.
Stammers: John Richard, B.A. (Arch.) (Lond.) [*A* 1941], Reigate.

AS ASSOCIATES (182)

Ainley: Brian, Bristol.
Alexander: Ernest Robert, B.Arch.(C.T.), Accra, Ghana.
Argent: Kenneth Norman, Waltham Abbey.
Arnold: Martin Herbert.
Ashbourne: Dennis, Warwick.
Atkinson: Derrick Stuart, Havant.
Austin: Barrymore, Dipl.Arch. (Pretoria), Pretoria, S. Africa.
Baker: Eric Charles.
Bargman: John, Dorking.
Bates: (Miss) Toni Elizabeth, B.Arch.(Sydney), Sydney, N.S.W., Australia.
Beake: Peter Ralph, Canterbury.
Beard: Norman William, Longlevens.
Bellamy: John Fullwood.
Bernard: Frank Ronald.
Biggs: Frederick Peter Garrard, Crawley.
Bisley: Patrick, Dursley.
Blakey: Ronald Barclay, Falkirk.
Buckman: Derek John.
Caple: Alan John.
Carter: David John, Bedford.
Cawdron: Edward John Hugh, Orpington.
Ciapson: Dennis, Tonbridge.
Clark: Sidney Frank, Bristol.
Clark: Wilfred Allan, Morecambe.
Clink: Joseph John, Cheltenham.
Cobert: Michael Norman, Gloucester.
Coleman: John Hadley Alan, Taunton.
Colven: Ronald Thomas John, Dipl.Arch. (U.C.L.), Stockholm.
Cooper: Dennis, Farnham.
Cooper: William Philip Roydon, Yeovil.
Coulson: James Clayton, Gateshead-on-Tyne.
Cracknell: Owen David, Cambridge.
Cutler: John Derek, Walsall.
Davis: Peter Alroy.
Davis: Thomas William, Sevenoaks.
Denney: Peter James, Dagenham.
De St. Croix: Michael, Horsham.
Dewhurst: Barrie, A.A.Dipl., Lusaka, Northern Rhodesia.
Dickinson: Frank Edward, Nottingham.
Dinerman: Alfred William, B.Sc.(Lond.).
Dixon: Donald, Newcastle upon Tyne.
Dowse: Keith Elsom, Hessle.
Draper: Kenneth Wallace, Epsom.
Dunaway: James Henry, Basingstoke.
Earle: Jeffrey Henry, West Kirby.
Evelyn: Kenneth Carlyle Murray.
Feldstein: Bernard.
Fijalkowski: Boleslaw W.
Fleming: Peter, Chichester.
Floydd: John David, Huntingdon.
Ford: Bernard Andrew, Hornchurch.
Ford: Terence Edward, Bristol.
Fox: John, Pontefract.
Frankcombe: Brian Howard, Wallington.
Franks: Ronald, Dip.Arch.(Birm.).
Fyson: Graham Dale, Dip.Arch. (The Polytechnic), Carshalton Beeches.
Gaskin: Peter, B.Arch.(L'pool), Liverpool.
Gibson: Thomas, Paisley.
Grandidge: Thomas Reginald Wilson, York.
Granelli: Remo, Dip.Arch.(Birm.), Birmingham.
Gray: Thomas Maxwell, D.A.(Glas.), Coleraine, Northern Ireland.
Greene: Keith Alfred.
Greenwell: Alan Robert, Newcastle upon Tyne.
Gurney: Arnold Ernest, Birmingham.
Haigh: Brian, Huddersfield.
Hall: (Miss) Rosemary, Groombridge.
Hardy: Graham Michael, Stoke-on-Trent.
Harrison: John Ferguson, Belfast.
Hawkes: Stanley Alan.
Heaton: John Michael, Dip.Arch.(Manchester), Edinburgh.
Henderson-Gray: Bruce Henry William, M.A.(Cantab.), Norwich.
Hiney: Lionel Maurice.
Hodgson: John Whitlock, Guildford.
Hogg: Alan Davis, Toronto, Ontario, Canada.
Hollis: David Michael, Rowlands Castle.
Howard: Eric Charles, Bishop's Stortford.
Hudson: Antony John, Bracknell.
Hughes: Alan Hooper, Epsom.
Hughes: Frederick Anthony, Dip.Arch. (The Polytechnic).
Hulme: Frank Philip, Newcastle, Staffs.
Inns: George Edward, Weymouth.
Jablonski: Ryszard-Krzysztof, Pretoria, S. Africa.
James: Gordon Wilfred, Solihull.
Jefford: William Francis, Cheltenham.
Jones: George Raymond, Wrexham.
Jump: Alfred Neil, Worcester Park.
Kemp: Raymond Joseph.
Kennedy: Peter George.
Kilkenny: Joseph A., Dublin.
King: Maurice Henry Albert.
Knight: Arthur John, Birmingham.
Knowles: Philip Michael Ward, York.
Knowling: Dennis, Brighton.
Knox: Denys Garnett Graham.
Lane: Dennis John, Dudley.
Lane: Michael John, Coulsdon.
Langdell: Geoffrey, Romford.
Langmead: Lydstone Stephen, Dip.Arch. (The Polytechnic), Wadhurst.
Lansley: John Wilfred, Wolverhampton.
Lawson: Gordon Reah James, Sunderland.
Leong: Stanley Thoe Sing, B.Arch.(Sydney), Singapore, Malaya.
Loveless: Donald Edward, Poole.
Mason: Alan Richard, Crawley.
Massey: George William, Pontefract.
Mathews: Frank, Barnet.
Mawson: Thomas Prentice, Lancaster.
Meldrum: Alan Frederick.
Michalska: (Miss) Alina, Montreal, Quebec, Canada.
Middleton: Terence John, Swansea.
Mills: John Edward.
Mitton: James Derek, Alton.
Mitton: Richard Charles, Dip.Arch.(Birm.), Sudbury, Derbyshire.
Muggleton: Brian Anthony, Rochford.
Mullan: Michael Brian, Belfast.
Newlove: John, Willerby.
Obermeister: Louis, Richmond, Surrey.
Oliver: Kenneth Armand, Chesham.
Poplett: Thomas A. J., East Grinstead.
Power: Gordon Cedric, B.A.(Arch.)(Lond.), Bristol.
Prichard: Leonard, Wellington.
Pye: Kenneth George, Blackpool.
Razzell: Kenneth William Charles, New Malden.
Redwood: John Norman.
Reid: Bruce, B.Arch.(Sydney), Concord, N.S.W., Australia.
Reynolds: Laurence William George.
Richmond: Captain Edward Watson, Cheam.
Ricketts: Dennis Gordon, St. Albans.
Roberts: Derek Edward.
Robertson: Gordon Walter, Ilford.
Robinson: Alan, Birmingham.
Robinson: Albert Stewart, Nelson.
Robinson: Gordon Eli, Eastbourne.
Robinson: Lawrence Alexander, Boreham Wood.
Rome: (Mrs.) Mary Lilyan.
Schofield: Lionel Martin, Barnet.
Seward: Alan Malcolm, Bournemouth.
Shaw: Richard Wyndham, Wolverhampton.
Skelton: Brian Malcolm Burkhill, Hove.
Stapleton: Reginald Clifford, Godalming.
Stewart: Peter Alexander.
Stott: Kenneth Allen, Richmond, Surrey.
Stroud: John Anthony, Folkestone.
Sumner: Joseph Bristoe, Preston.
Surti: Dadi Ratansha.
Sykes: Laurence Duncan Field, Wakefield.
Taggart: Innes, D.A.(Glas.), Glasgow.
Taylor: Alfred Steele, Stoke-on-Trent.
Taylor: Rodney Herbert Frederick, Reading.
Thomas: Jack Michael.
Thorne: Dennis Howard, Birmingham.
Thornton: Roy Clarence, Birmingham.
Tilley: Neville Scott, Chertsey.
Todd: Raymond Barton, Hull.
Townsend: Alan Marsden, Dip.Arch.(Birm.), Birmingham.
Trowbridge: John Kerley, Dip.Arch.(Leics.), Southampton.
Turner: Roy Frederick, Bookham.
Upfold: John Kenneth, Petersfield.
Vaclavik: Jiri George.
Wagner: Albert Arthur William, Billericay.
Walsingham: Peter Roland, Cheadle.
Ward: Cecil, Worthing.
Wareing: Anthony Gilbert, Kenilworth.
Watson: Francis, Stockport.
Weal: Francis.
Webb: Ian Alastair Beament.
Weddle: Brian, Manchester.
Wheatley: George, Loughborough.
Whitaker: Warwick Timothy, Jersey, Channel Islands.
White: Brian Kendall.
White: Derek Norman, Chelmsford.
White: Henry Alfred.
Whitfield: Stewart, Newcastle upon Tyne.
Whittemore: James Ernest, Worcester Park.
Whitworth: Fred, Burnley.
Whyte: Archibald Murray, Glasgow.
Wigmore: Colin, Huddersfield.
Wildgoose: Alexander, Uphall Station.
Wilkin: Michael John, Dipl.Arch.(U.C.L.), Wadhurst.
Wilkinson: Michael Walter, Northampton.
Williams: Frank, B.A.(Arch.) (Manchester), Manchester.
Wojnar: Stanislaw Kazimierz, Virtuti Military Cross, Croix de Guerre, Stoke-on-Trent.
Woodford: Eric Raymond Reginald, Guildford.

ELECTION: 7 OCTOBER 1958

An election of candidates for membership will take place on 7 October 1958. The names and addresses of the candidates, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, R.I.B.A., not later than Monday 11 August 1958.

The names following the applicant's address are those of his proposers.

AS FELLOWS (6)

Bragg: Stanley Edward [*A* 1938] 119/121 High Street, Witham, Essex; Orchard House,

Wickham Bishops, Essex. Harold Conolly, Stanley Hamp, E. D. J. Mathews.

Collins: John Edward [*A* 1951], Messrs. E. S. and A. Robinson Ltd., Redcliff Street, Bristol; Spring Leigh, Leigh Woods, Bristol. T. H. B. Burrough, E. H. Button, Eric Ross.

Doubie: Robert James [*A* 1947], 8 Percy Street, W.1; 49 Etchingham Park Road, Finchley, N.3. Frederick Gibberd, F. R. S. Yorke, A. E. Kelsey.

Smith: Haydn William [*A* 1949], 195 Oxford Road, Manchester, 13; 58 Cavendish Road, Heaton Mersey, Stockport, Cheshire. W. C. Young, R. M. McNaught, L. C. Howitt.

and the following Licentiates who are qualified under Section IV, Clause 4(*c*)(*ii*) of the Supplemental Charter of 1925:—

Levitt: Frederick Charles, Commerce House, Biggleswade, Beds.; Holme Woods, Biggleswade. S. V. Goodman, F. C. Saxon, Peter Dunham.

Wright: Joshua Stanley, M.C., 7–11, Brunswick Terrace, Leeds, 2; Brantwood House, Boston Spa, Yorks. F. Chippindale, Noel Pyman, Harry Jackman.

AS ASSOCIATES (52)

The name of a school, or schools, after a candidate's name indicates the passing of a recognised course.

Ashdown: Michael Frank Bruce, Dipl.Arch. (U.C.L.) (Bartlett Sch. of Arch.: Univ. of London), Church Street, Wedmore, Somerset. Prof. H. O. Corfiato, R. C. White-Cooper, Thomas Ritchie.

Baines: Eric, Dip.Arch.(Nottm.) (Nottingham Sch. of Arch.), 8 Bent Lane, Matlock, Derbyshire. F. H. Crossley, E. H. Ashburner, N. Summers.

Bannister: James, Dip.Arch.(Sheffield) (Univ. of Sheffield: Dept. of Arch.), 40 Hesketh Road, Ribbleton, Preston, Lancs. Prof. Stephen Welsh, Prof. John Needham, H. B. Leighton.

Billingham: John David, (Final), 288 Chingford Road, Walthamstow, E.17. D. W. Aldred, C. M. Vine, G. B. Colburn.

Bishop: David, Dipl.Arch. (Northern Polytechnic) (Northern Poly. (London): Dept. of Arch.), 9 Chester Close, Kings Road, Richmond, Surrey. T. E. Scott, S. F. Burley, C. G. Bath.

Bond: Peter Bernard, A.A.Dipl. (Arch. Assoc.(London): Sch. of Arch.), Inverness Lodge, 12, Alton Road, Roehampton, S.W.15. E. M. Fry, Miss J. B. Drew, D. L. Lasdun.

Box: Richard Cecil, (Northern Poly. (London): Dept. of Arch.), 36 Upcroft Avenue, Edgware, Middlesex. T. E. Scott, C. G. Bath, S. F. Burley.

Brown: Dennis John Trevor, Dipl.Arch. (Oxford) (Sch. of Tech. Art and Commerce, Oxford: Sch. of Arch.), 105 Epsom Road, Guildford, Surrey. Reginald Cave, I. F. Roberts, A. D. Coward.

Burton: Geoffrey, (Final), 20 Kingsley Road, Green Street Green, Farnborough, Kent. Thomas Bilbow, E. J. Edwards, J. S. Walkden.

Classey: Eric Cyril, Dipl.Arch.(Northern Polytechnic) (Northern Poly.(London): Dept. of Arch.), 24 Hill Drive, Kingsbury, N.W.9. T. E. Scott, S. F. Burley, A. E. Miller.

Clyne: (Miss) Coila Christine, Dipl.Arch. (Northern Polytechnic) (Northern Poly.(London): Dept. of Arch.), Farmhouse, High Cross, Near Ware, Hertfordshire. T. E. Scott, H. F. Robinson, C. H. Aslin.

Critchlow: David Michael, (Arch.Assoc. (London) Sch. of Arch.), 71 British Grove, W.4. S. E. T. Cusdin, Sir Howard Robertson, F. L. Preston.

Dann: Frank James Winstone, Dipl.Arch. (Oxford) (Sch. of Tech. Art and Commerce, Oxford: Sch. of Arch.), 61 The Parade, Leamington Spa, Warwicks. Reginald Cave, P. H. F. Stiles, Keith Murray.

Davison: John Reginald, Dipl.Arch. (Northern Polytechnic) (Northern Poly.(London): Dept. of Arch.), 7 Mapleton Crescent, Enfield, Middlesex. T. E. Scott, S. F. Burley, E. H. Firmin.

Des Graz: (Miss) Bridget Mary Rhona, A.A.Dipl.(Arch. Assoc.(London): Sch. of Arch.), 5 Montpelier Walk, S.W.7. E. M. Fry, Miss J. B. Drew, D. L. Lasdun.

Donat: John Annesley, A.A.Dipl. (Arch. Assoc.(London): Sch. of Arch.), 17 Grove Terrace, N. W.5. C. K. Capon, M. H. Cooke-Yarborough, A. W. Cox.

Donnelly: Michael Raphael, B.Arch.(N.U.I. Dublin) (Univ. Coll. Dublin, Ireland: Sch. of Arch.), 69 Bawnmore Road, Belfast. Prof. J. V. Downes, Val Smyth, B. Cowser.

Elsworth: Brian, Dipl.Arch.(Leeds) (Leeds Sch. of Arch.), 21 Ovington Square, S.W.3. F. Chippindale, D. A. Fowler, Richard Sheppard.

Erber: Eric, (Final), 2 The Pryors, East Heath Road, N.W.3. E. M. Rice, G. R. Dawbarn, Alick Low.

Foster: John Edwin, Dipl.Arch. (Northern Polytechnic) (Northern Poly.(London): Dept. of Arch.), 12 Ferney Road, Byfleet, Surrey. T. E. Scott, C. G. Bath, S. F. Burley.

Girdlestone: Eric Geoffrey, (Northern Poly. (London): Dept. of Arch.), 42 Hillfield Avenue, The Hyde, Hendon, N.W.9. T. E. Scott, C. G. Bath, S. F. Burley.

Gloag: Bruce Stuart Leuchars, B.Arch. (Rand) (Passed a qualifying Exam. approved by the I.S.A.A.), c/o Barclays Bank D.C.O., 1 Oceanic House, 1 Cockspur Street, S.W.1. Applying for nomination by the Council under Bye-law 3(*d*).

Harker: Thomas Swinburne, (Final), Old Timbers, Burton-in-Wirral, Cheshire. R. W. Cave, T. A. Brittain, F. T. Pritchard.

Harrington: John Hunter, Dip.Arch.(Nottm.) (Nottingham Sch. of Arch.), 212 Rutland Road, West Bridgford, Nottingham. J. G. Woollatt, T. N. Cartwright, J. W. M. Dudding.

Hassall: Antony John, Dipl.Arch.(Northern Polytechnic) (Northern Poly.(London): Dept. of Arch.), 'Selworthy,' 13 High Street, Rainham, Gillingham, Kent. T. E. Scott, S. F. Burley, C. G. Bath.

Helliwell: Brian, B.Arch.(Dunelm) (King's Coll.(Univ. of Durham), Newcastle upon Tyne, Sch. of Arch.), 155, Hibson Road, Nelson, Lancashire. Prof. W. B. Edwards, Bruce Allsopp, F. Fielden.

Hendry: Donald Rushton, Dipl.Arch. (Northern Polytechnic) (Northern Poly.(London): Dept. of Arch.), 118 Constable Road, Ipswich, Suffolk. T. E. Scott, C. G. Bath, S. F. Burley.

Heppell: Nigel James, Dip.Arch.(Sheffield) (Univ. of Sheffield, Dept. of Arch.), 11 Laurel Road, Barnes, S.W.13. Prof. Stephen Welsh, H. B. Leighton, R. Hellberg.

Hinge: Ronald Bernard, Dipl.Arch.(Northern Polytechnic) (Northern Poly.(London): Dept. of Arch.), 11 Pepy's Court, Worple Road, Wimbledon, S.W.20. T. E. Scott, S. F. Burley, C. G. Bath.

Hollingsworth: Ivor, (Final), 44 Greenhills Road, Eastwood, Notts. E. H. Ashburner, H. H. Dawson, C. F. W. Haseldine.

Johnson: Rex Sutherland, Dipl.Arch. (Northern Polytechnic) (Northern Poly. (London): Dept. of Arch.), 39B, Brooke Avenue, South Harrow, Middlesex. Sir Thomas Bennett, P. H. P. Bennett, M. L. Winslade.

King: David Reginald, Dip.Arch.(The Polytechnic) (The Poly. Regent Street, London, Sch. of Arch), 'Beverley', Landford, Nr. Salisbury, Wiltshire. J. S. Walkden, J. S. Foster, Peter Goodridge.

Loney: William Peter, (Special Final), Flat C, 13 Cleveland Road, W.13. Thomas Bilbow, A. V. Elliott, K. J. H. Seymour.

Macpherson: Ian C., B.A.(Arch.)(Lond.) (Bartlett Sch. of Arch.: Univ of London), The Copse, East Horsley, Leatherhead, Surrey. Donald Macpherson, P. V. Burnett, G. H. Fielder.

Mungham: John Arthur, Dipl.Arch.(Northern Polytechnic) (Northern Poly.(London): Dept. of Arch.), The School House, The Hyde School, Hendon, N.W.9. T. E. Scott, G. Langley-Taylor, Frank Risdon.

Munn: Antony Cecil, Dipl.Arch.(Northern Polytechnic) (Northern Poly.(London): Dept. of Arch.), 24 Avenue Road, Highgate, N.6. T. E. Scott, C. G. Bath, S. F. Burley.

O'Neill: Hugh Chichester, (Final), 11 Glenhurst Avenue, Ipswich, Suffolk. J. G. Woollatt, T. N. Cartwright, J. W. M. Dudding.

Phippen: Peter, (Final), 64 Trundleys Road, Deptford, S.E.8. T. H. B. Burrough, Richard Sheppard, Harold Jones.

Porter: Samuel Harold, (Final), 'Avondale', 266 Pinner Road, North Harrow, Middlesex. Applying for nomination by the Council under Bye-law 3(*d*).

Richardson: James William, (Special Final), 14 Copse Road, Cobham, Surrey. R. J. Duke, Eric Pettengell, Val Elsey.

Ringshall: Ronald James, A.A.Dipl.(Arch. Assoc.(London): Sch. of Arch.), 47 Cavendish Road, Sutton, Surrey. Arthur Korn, H. G. Goddard, Anthony Cox.

Ross: John, B.Arch.(Rand.) (Passed a qualifying Exam. approved by the I.S.A.A.), 53A, Oakley Street, Chelsea, S.W.3. F. R. S. Yorke, Cyril Mardall, E. E. Rosenberg.

Roth: Stephen John, (Northern Poly.(London): Dept. of Arch.), 5 Washington Road, Woodford, E.18. T. E. Scott, C. G. Bath, The Hon. Lionel Brett.

Rushton: Alan, (Special Final), 46 Sawrey Street, Feniscliffe, Blackburn, Lancs. Frank Bradley, D. Wynne-Thomas, R. M. McNaught.

Ryan: Michael Enda, B.Arch.(N.U.I.Dublin) (Univ. Coll. Dublin, Ireland: Sch. of Arch.), St. Thérese, Nerano Road, Dalkey, Co. Dublin. Prof. J. V. Downes, J. J. Robinson, P. J. Munden.

Shaw-Stewart: Michael, M.A.(Cantab.), A.A.Dipl. (Arch. Assoc.(London): Sch. of Arch.), Letham, Haddington, East Lothian. Arthur Korn, H. G. Goddard, W. H. Kininmonth.

Spence: Philip Hill, D.A.(Glas.) (Glasgow Sch. of Arch.), 129 Buchanan Street, Coatbridge, Lanarkshire. Prof. W. J. Smith, A. D. Cordiner, T. J. Beveridge.

Streatfield: David Claude, (Final), 169 Old Shoreham Road, Hove 4, Sussex. Applying for nomination by the Council under Bye-law 3(*d*).

Thornton: Ian Charles, M.C.D., B.Arch. (L'pool) (Liverpool Sch. of Arch.: Univ. of Liverpool), 'Corallo', 59 Falinge Road, Rochdale, Lancs. Prof. R. Gardner-Medwin, W. H. G. Dobie, P. S. P. Morter.

West: David James, (Special Final), Saxons, Pear Tree Lane, Rowledge, Farnham, Surrey. W. F. Howard, T. G. Jackson, Frank Risdon.

White: James Peter, Dip.Arch.(Sheffield) (Univ. of Sheffield, Dept. of Arch.), 20 Beaufort Road, Sheffield, 10. Prof. Stephen Welsh, Prof. John Needham, J. L. Womersley.

White: Thomas Frederick Randle, (Final), 75 Charles Street, Milford Haven, Pembrokeshire. Paul Nightingale, Edwin Rice, Dr. R. Herz.

ELECTION: 4 NOVEMBER 1958

An election of candidates for membership will take place on 4 November 1958. The names and addresses of the overseas candidates, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, R.I.B.A., not later than Friday 24 October, 1958.

The names following the applicant's address are those of his proposers.

AS FELLOWS (3)

Ball: Kenneth James, Dip.Arch.(Sheffield) [*A* 1947], Chief Architect, Public Works Department, Singapore, Malaya; 154 Mount Pleasant Road, Singapore, 11. T. A. L. Concannon, C. J. Parker, C. Y. Koh.

Barker: Graeme Charles [*A* 1951], P.O. Box 2878, Nairobi, Kenya, E. Africa; Balmoral Road, Nairobi. E. L. T. Hoare, G. B. E. Norburn, C. J. Crowe.

Stephenson: Arthur Peter, M.Arch.(Harvard), B.Arch.(Sydney) [*A* 1949], 40 Miller Street, North Sydney, N.S.W., Australia; 24 Iluka Road, Clifton Gardens, N.S.W. G. L. Moline, J. L. S. Mansfield, Cobden Parkes.

AS ASSOCIATES (7)

The names of a school, or schools, after a candidate's name indicates the passing of a recognised course.

Deshmukh: Ramesh Govind, (Final), Plot No. 234, 10th Road, Chembur, Bombay, India. C. M. Master, S. H. Parelkar, H. N. Dallas.

Gokhale: Shrikrishna Laxman, (Final), c/o Dr. G. B. Godbole, Dombivali, Dist. Thana, Bombay State, India. Prof. S. S. Reuben, S. J. Narwekar, G. S. Dadarkar.

Kelvey: Daniel Whatley, Dip.Arch.(Auck., N.Z.) (Passed a qualifying Exam. approved by the R.A.I.A.), 19 Kapunda Street, Toowong, Brisbane, Australia. Prof. R. P. Cummings, F. G. Costello, T. B. F. Gargett.

Li: Hoch Hung, B.Arch.(Melbourne) (Passed a qualifying Exam. approved by the R.A.I.A.), 2 Kee Choe Avenue, Sennett Estate, Singapore 13, Malaya. Prof. B. B. Lewis, R. G. Parker, Mrs. Hilary Lewis.

Raje: Anant Damodar, (Final), 416 14th A. Road, Khar, Bombay 21, India. Prof. S. S. Reuben, S. H. Parelkar, H. N. Dallas.

Waters: Ian Thomas, B.Arch.(Sydney) (Passed a qualifying Exam. approved by the R.A.I.A.), 96 Woodlawn Avenue, Wollongong 5c, N.S.W., Australia. Prof. H. I. Ashworth, P. J. Gordon, S. G. Thorp.

Wong: Benedict Chin Fah, (Final), c/o P.W.D. Headquarters, Maxwell Road, Kuala Lumpur, Malaya. T. H. B. Burrough, E. H. Button, Kenneth Nealon.

Members' Column

This column is reserved for notices of changes of address, partnerships vacant or wanted, practices for sale or wanted, office accommodation, and personal notices other than of posts wanted as salaried assistants for which the Institute's Employment Register is maintained.

DISCLAIMER

Mr. John Reginald Davison [*Student*], whose name appears in the list of candidates for election to the Associateship on 7 October on page 359, wishes to state that he has no connection, nor ever has had with an organisation trading under the title of 'The Modular Design Group'.

APPOINTMENTS

Mr. Paul H. Rodgers [*A*] has taken up the appointment of Chief Assistant Architect to Whiston Rural District Council and his address is now Council Offices, Whiston, Prescot, Lancs., to which all trade literature should be addressed.

Mr. Noel Tweddell, T.D. [*A*], who has been the Architect-Planner of Basildon New Town since its inception in 1949, has resigned to take up the appointment of Deputy Director to the Civic Trust in London and undertake architectural and planning work on his own account. Basildon Development Corporation have appointed **Mr. A. B. Davies** [*A*], at present Deputy Chief Architect-Planner, to succeed Mr. Tweddell.

PRACTICES AND PARTNERSHIPS

Mr. Ian D. W. Campbell (formerly Denis Wilson Ian Campbell) [*A*] is now practising on his own account from 22 Colenso Parade, Belfast, N. Ireland.

Mr. John L. Seaton Dahl [*F*] has retired from practice and the firm of **Dahl and Cadman** of 8 Cheriton Gardens, Folkestone, will be continued by **Mr. H. G. Cadman** [*A*] under the same name and at the same address.

Mr. Ian R. Dalgetty [*L*] has commenced practice on his own account at 30 Allan Street, Blairgowrie, Perthshire (Blairgowrie 578), where trade catalogues will be welcome.

Mr. John Neil [*A*] is now practising on his own account at 39 University Road, Belfast (Belfast 21362), where he will be pleased to receive trade catalogues, etc.

The practice of the late **James V. T. Scott** [*F*] is being continued by a partnership consisting of his widow, **Mrs. J. V. T. Scott, Major E. W. Beaumont** [*A*] and **Mr. T. A. Houston** [*A*], under the style of **James V. T. Scott and Partners** at 30 College Gardens, Belfast (Belfast 31344), and will be carried on quite separately from that run by Messrs. Houston and Beaumont at 41 Donegall Place, Belfast.

Mr. G. J. W. Thomas [*A*] has begun practice at 20 St. Alkmund's Churchyard, Derby, where he will be pleased to receive trade literature.

The partnership of **Turley and Williamson** has been dissolved by mutual consent. **Mr. Richard Turley** [*A*] will now practise under the style of **Richard Turley and Associates** at 46 Jesmond Road, Newcastle upon Tyne, 2 (Newcastle 814391–2), and **Mr. W. H. Williamson** [*A*] will practise as **W. H. Williamson and Partners** at 7 St. Mary's Place, Newcastle upon Tyne, 1 (Newcastle 26608).

CHANGE OF ADDRESS

Mr. Derek A. de-G. Abbott [*A*] has changed his address to 1 Vicarage Gate, Kensington, London, W.8.

Mr. B. R. Archer [*A*] has changed his address to 25 Woodland Rise, Sherrardspark, Welwyn Garden City, Herts.

Mr. Philip G. Lees [*L*] has changed his address to 'Holmleigh', Fosters Booth, nr. Towcester, Northants.

Mr. B. D. J. Meehan [*A*] has changed his address to 27A Tregunter Road, Kensington, London, S.W.10 (Fremantle 1242).

Mr. Dan J. Middlebrook [*A*] has changed his address to Box 187, Woods-Hole, Massachusetts, U.S.A.

Messrs. Edwin Pover and Son (O. B. Raven [*L*], sole partner) have changed their address to 15 East Street, Faversham, Kent.

The address of **Messrs. Rigby and Mullan (A. McK. Rigby** [*A*], **A. J. Mullan** [*A*] and **L. K. James** [*A*]) is now A/N.Z. Bank Chambers, High Street, Hawera, New Zealand.

Messrs. Fitzroy Robinson and Partners [*F/A*] have opened a branch office at 50 Norfolk Square, Brighton 1, where they will be pleased to receive trade catalogues, etc.

Mr. John G. A. Sheehan-Dare [*A*] has changed his address to 'Pinebank', Hollington Park Road, St. Leonards-on-Sea, Sussex.

Mr. R. D. Walshaw [*A*] has changed his address to 39 Barley Way, Putnoe, Bedford.

Mr. M. A. S. Williams [*A*] has changed his address to c/o Architectural Division, Public Works Department, George Street, Perth, Western Australia.

Mr. R. R. Worskett [*A*] has changed his address to 32 Smithbarn, Horsham, Sussex.

CHANGE OF TELEPHONE NUMBER

The telephone number of **Mr. William George Wilson** [*A*] of Messrs. Smith, Wilson and Cox [*F/A*], 103 Bute Street, Cardiff, is Cardiff 27459 and not as given in the Kalendar.

PRACTICES AND PARTNERSHIPS WANTED AND AVAILABLE

Member wishes to purchase small practice or partnership in S.W. London or Surrey area. Write for further particulars to Box 68, c/o Secretary, R.I.B.A.

Fellow, with small private practice, intending to move to fresh district in south of England, preferably near coast and within 120 miles of London, Hants. preferred, would be glad to contact other practitioner with a view to mutual help, share of office and/or staff, etc. Box 69, c/o Secretary, R.I.B.A.

ACCOMMODATION

Provincial member requires accommodation address and use of room for interviewing purposes approximately once a fortnight. Preferably in West End area. Box 67, c/o Secretary, R.I.B.A.

The Royal Institute of British Architects, as a body, is not responsible for statements made or opinions expressed in the JOURNAL.

PROFESSIONAL INDEMNITY

The claims made against Architects in recent years alleging professional negligence show a striking increase both in number and size. It is found of course that many of these claims prove to be without foundation, but inevitably legal expenses—often very substantial—are incurred in rebutting the charges made. Experience shows that costs awarded against an unsuccessful claimant may, in fact, be irrecoverable.

In conjunction with Underwriters at Lloyd's the Agency offers comprehensive Indemnity to Architects covering any amounts the Architect may be required to pay in the event of a claim against him succeeding as well as the full cost of legal defence whatever the outcome of the case. The costs incurred in litigation in recovering or attempting to recover professional fees are also covered. This policy affords the widest protection at a competitive rate of premium. Write for particulars to:—

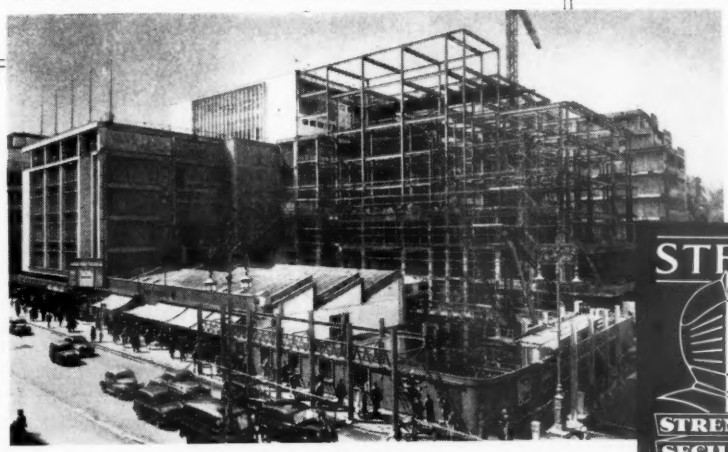
The Manager,
A.B.S. Insurance Agency Ltd.,
66, Portland Place,
London, W.1.
(Telephone: LANgham 5533.)

STEEL

The new JOHN LEWIS store

This great store, which will cover an important island site adjoining Oxford Street, is being built in six stages, so arranged that the maximum business use can be made of the site while construction proceeds. The first stage is shown completed in the left of the lower photo.

Architects: Messrs. Slater & Uren, F/F.R.I.B.A.
Consulting Engineers: Messrs. Hurst, Peirce & Malcolm, M/M.I.C.E., M/M.I.Str.E.

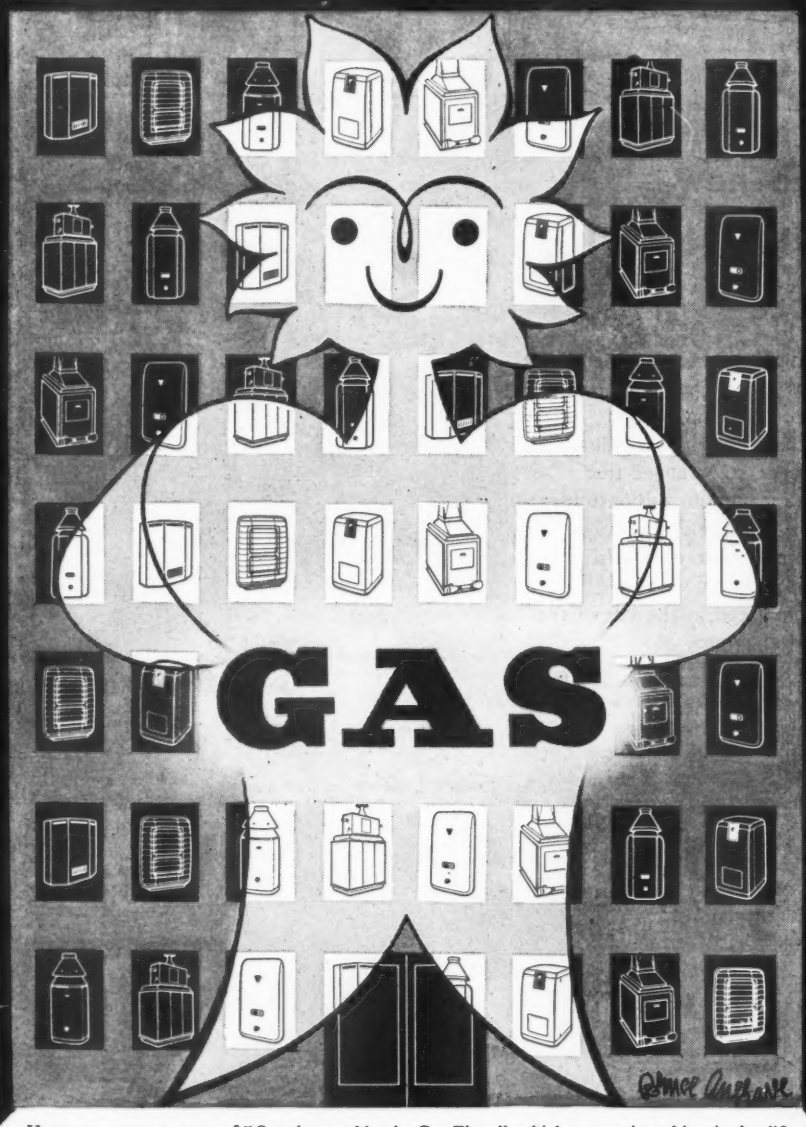


STEEL
STRENGTH
SECURITY

B·C·S·A

BRITISH CONSTRUCTIONAL STEELWORK ASSOCIATION
ARTILLERY HOUSE, ARTILLERY ROW, WESTMINSTER, LONDON, S.W.1

For Modern Flue Systems

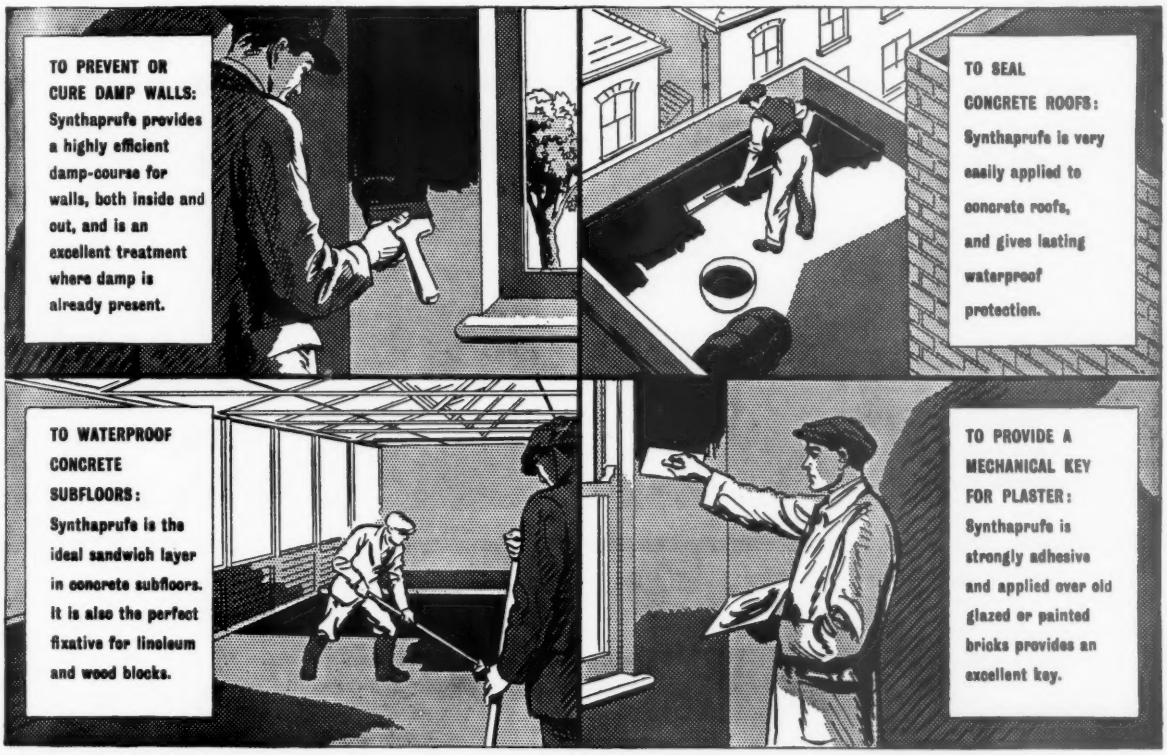


Have you got your copy of "Supplement No. 4—Gas Flues", which covers the subject in detail?
Ask your Area Gas Board or write to

THE GAS COUNCIL · 1 GROSVENOR PLACE · LONDON · S.W.1

A brush-on waterproofing that contains **rubber...**

ELASTIC • ADHESIVE • IT MAKES AN IDEAL JOINTING


TO PREVENT OR CURE DAMP WALLS: Synthaprufe provides a highly efficient damp-course for walls, both inside and out, and is an excellent treatment where damp is already present.
TO SEAL CONCRETE ROOFS: Synthaprufe is very easily applied to concrete roofs, and gives lasting waterproof protection.
TO WATERPROOF CONCRETE SUBFLOORS: Synthaprufe is the ideal sandwich layer in concrete subfloors. It is also the perfect fixative for linoleum and wood blocks.
TO PROVIDE A MECHANICAL KEY FOR PLASTER: Synthaprufe is strongly adhesive and applied over old glazed or painted bricks provides an excellent key.

SYNTHAPRUFE is a waterproofing compound which can be applied cold by brush; its rubber content makes it strongly adhesive, and it sets quickly and forms a strong, elastic, moisture-proof film.

Most surfaces will take Synthaprufe—concrete, plaster, brick, metal or timber—and it is equally effective on old or new buildings.

Synthaprufe is also highly effective as a vertical damp-course on either external or internal surfaces, and is most valuable for treating damp in existing walls.

When applied over old and shabby glazed brick or painted brick wall surfaces (e.g. in hospitals, institutions and factories) Synthaprufe provides an excellent mechanical key for plaster finishes. This process obviates the noise, discomfort and expense of hacking.

When Synthaprufe is applied to inside walls it may be finished in distemper, wall-paper or emulsion paint; full instructions will be furnished by the manufacturers.

Synthaprufe offers the architect, builder, and engineer a waterproofing and jointing material of unusual efficiency and versatility, ready to use and easily applied.

Some special uses

- Sealing concrete structures above and below ground-level, cooling-towers, etc.
- Protecting concrete piles, steel-work, sewer-pipes and joints, etc.
- Waterproofing old asphalt, lead, zinc, corrugated iron, or felted roofs.

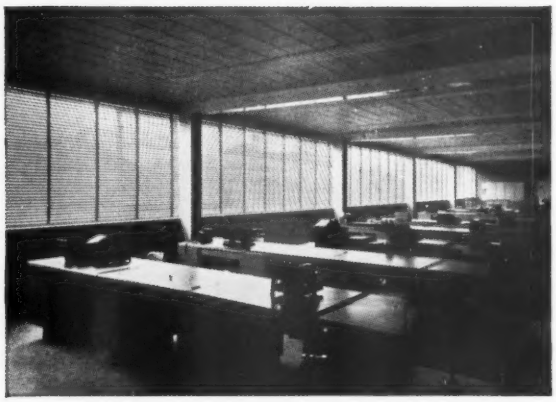
SYNTHAPRUFE

Manufactured by the NCB *National Coal Board*

Synthaprufe is a product of British Coal. Further details, and advice on any technical problem, will gladly be given on application to the National Coal Board, By Products, National Provincial Bank Buildings, Docks, Cardiff.

"Synthaprufe" is a Registered Trade Mark

A new approach to the design and installation of Venetian Blinds



For far too long the many good points of venetian blinds have been overshadowed by unreliability and difficulties of installation. The Crittall Solomatic has been designed to solve these problems.

Its outstanding points are these:

1 *There are no cords to dangle, tangle or wear – one single control (single strap, double strap or gear) tilts the slats as well as raising or lowering the blind.*

2 *Uneven lowering is made impossible.*

3 *A double-cross web ladder tape prevents flutter.*

Every Solomatic blind is made to measure so that it belongs to the window – is not just a patchwork addition to it. Crittall are fully equipped to provide a complete planning and installation service for an entire building – new or old. Write for leaflet.

CRITTALL solomatic VENETIAN BLINDS

–made to measure and made to last

THE CRITTALL MANUFACTURING COMPANY LIMITED · BRAINTREE · ESSEX · *Branches and Depots throughout the country*

TBW/91

the authorship of skilled hands

No mechanical device can match the skill and authorship of the Maple-Martyn craftsman. In ships, in churches, in palaces, in civic, commercial and social foundations and in private residences throughout the world one may behold the truth of this point.

Ornamental Ceiling Moulding in Fibrous Plaster

AND NOW AT NEWCASTLE. The comprehensive MAPLE-MARTYN Contracts Service is now available from ROBSONS 42 Northumberland Street, NEWCASTLE, a recently acquired subsidiary.

fibrous plaster
architectural woodwork
furniture and decoration
architectural metalwork
stone and wood carving

MAPLE MARTYN

Contract Department
MAPLE & CO. LTD · TOTTENHAM COURT ROAD · LONDON · W.1
in association with its Subsidiary : H. H. Martyn & Company Limited, Cheltenham

MC52a

Splendid Isolation

BLACK SHEATHING FELT gives complete and utterly effective isolation from the substructure without cracking as movements of buildings are not transferred to the asphalte.

This tough composition of waterproofed jute and flax fibres is the ideal underlining for hot asphalte, and the perfect keying medium.

There is no wrinkling while laying and Black Sheathing Felt is not easily damaged. Simple and pleasant to lay, it aids application by retaining heat.

Architects help themselves—help experienced asphalters by specifying Black Sheathing Felt—laid to last.

Specify **Asphalte laid on**

BLACK SHEATHING FELT

for your job

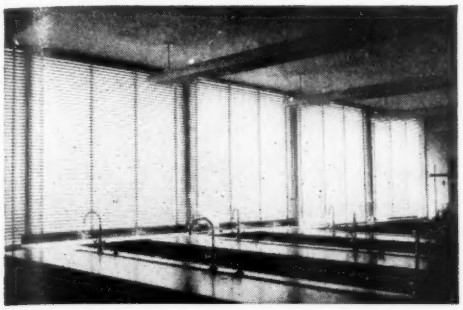
Make sure the Underlay is
BLACK SHEATHING FELT
UNDER THE ASPHALTE
BLACK SHEATHING FELT
All rolls bear this sign. It is the architects' and asphalters' assurance of top quality underfelt. Accept no substitute for Black Sheathing Felt.

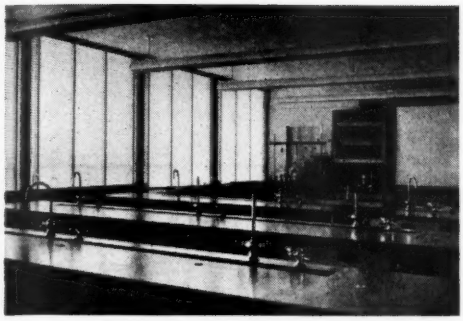
Manufactured by

D. Anderson & Son, Ltd., Manchester; Engert & Rolfe Ltd., London; John Erskine Ltd., Belfast; Robt. McCalmont & Sons Ltd., Belfast; F. McNeill & Co. Ltd., London; Permanite Ltd., London; John Rogers Ltd., Belfast.

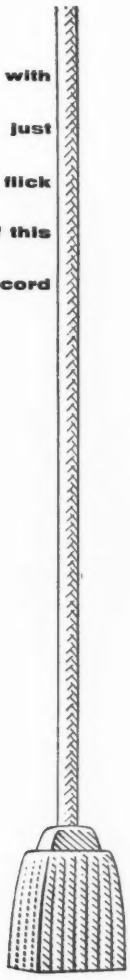
B.S.F.11

night at noon





with just a flick of this cord



Luxaflex audio-visual blinds provide a quick and effective means of putting a well-lit lecture hall or classroom into complete darkness for showing films, slides and television. And Luxaflex audio-visual blinds do double duty, combining sun protection and controlled daylight diffusion with black-out facilities in one attractive window covering.

- Cord control varies light from broad daylight to complete darkness.
- Complete closure gives ideal projector darkness. Pictures are sharply defined; colours are seen to full advantage.
- Audio-visual blinds possess acoustic properties superior to any other system. Audibility of speakers is improved throughout the room.
- Adequate ventilation is assured, even when the blinds are fully closed.
- Audio-visual blinds also give sun protection, cut glare, and ensure efficient daylight distribution throughout the room.

Full details of Luxaflex Audio-Visual Blinds will gladly be supplied on request. Ask also for literature about Luxaflex Venetian Blinds and Luxaflex Draw Drapes (vertical blinds). Write or 'phone: HUNTER DOUGLAS (Great Britain) LTD., 162 BROMPTON ROAD, LONDON, S.W.3. KNIghtsbridge 4488/9.

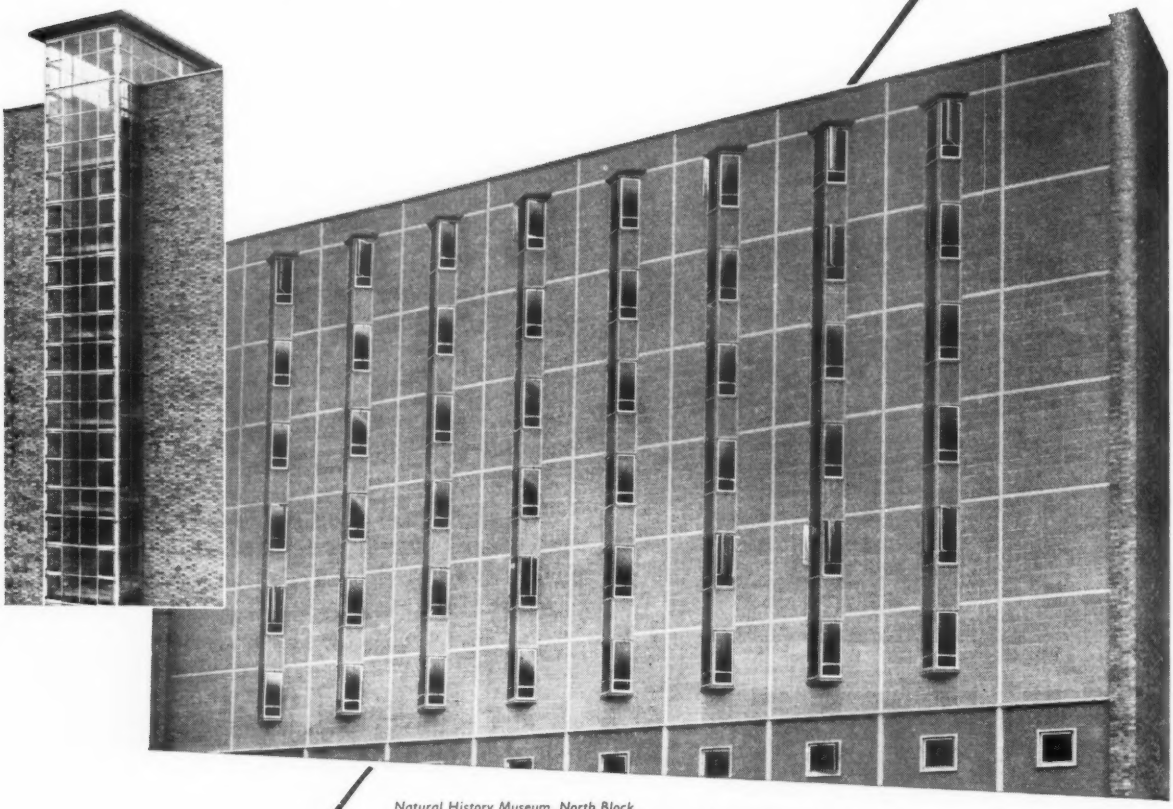
Be sure that the blinds you specify carry the LUXAFLEX trade-mark on the bottom rail. It is your guarantee of a quality product.

Luxaflex

REGISTERED TRADE-MARK

audio-visual blinds

when there's no 'STANDARD' *answer...*



Natural History Museum, North Block.
Inset photograph shows South West Staircase windows constructed in aluminium.
Photograph by courtesy of the Ministry of Works.
Contractors: A. Roberts & Co., Ltd.
Purpose-made metal windows and curtain walling by A. Beanes & Co., Ltd.

CONTACT **BEANES**

FOR *Purpose-made* METAL WINDOWS

A. BEANES AND COMPANY LIMITED

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METAL WINDOW MANUFACTURERS SINCE 1877

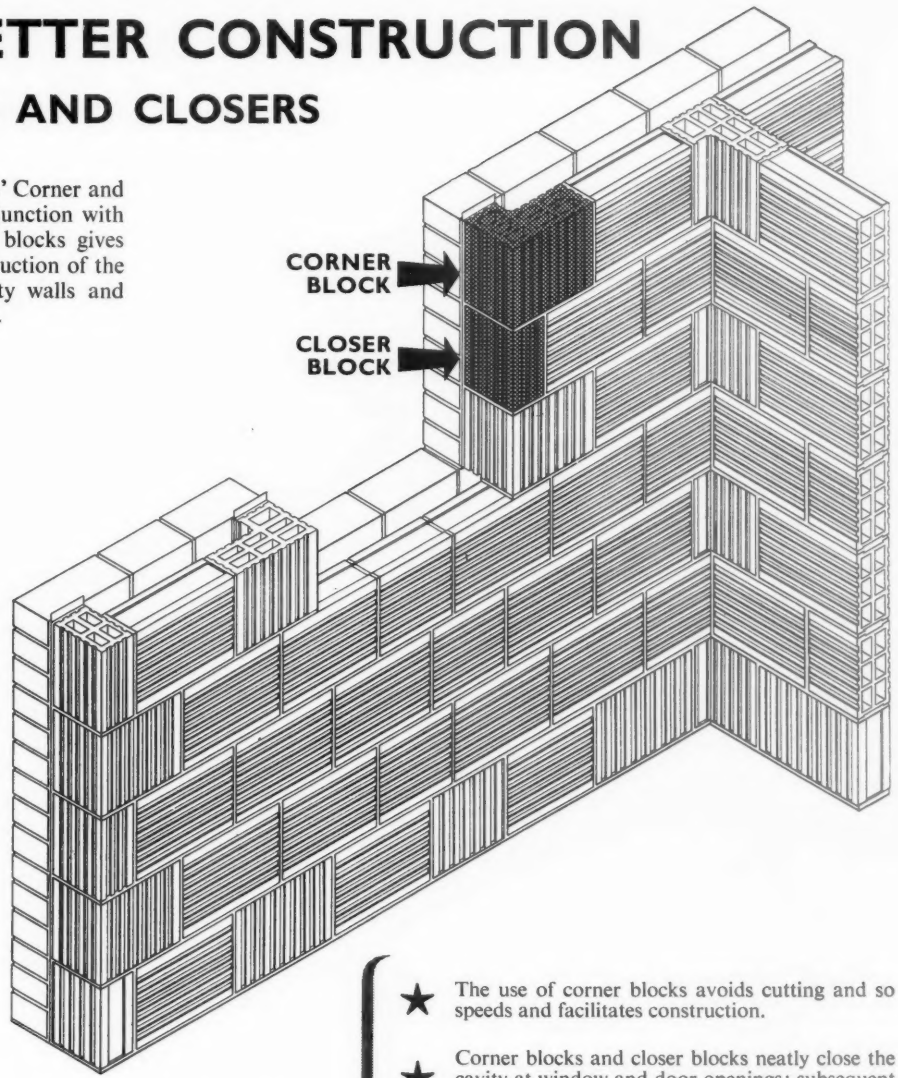
WS 1622

HOLLOW CLAY BLOCKS

FOR BETTER CONSTRUCTION

CORNERS AND CLOSERS

The use of 'Phorpres' Corner and Closer blocks in conjunction with 'Phorpres' Standard blocks gives better, quicker construction of the internal leaf of cavity walls and of internal partitions.



THE ADVANTAGES

- ★ The use of corner blocks avoids cutting and so speeds and facilitates construction.
- ★ Corner blocks and closer blocks neatly close the cavity at window and door openings; subsequent filling of the cavity end is eliminated.
- ★ These special blocks provide a good tight backing for insertion of vertical D.P.C. in cavity walls.
- ★ The use of corner and closer blocks provides a clean, workmanlike finish—a mechanical key for plaster can be supplied if required.

AVAILABILITY

'Phorpres' Corner and Closer blocks are available with every delivery of 'Phorpres' Standard Building blocks.

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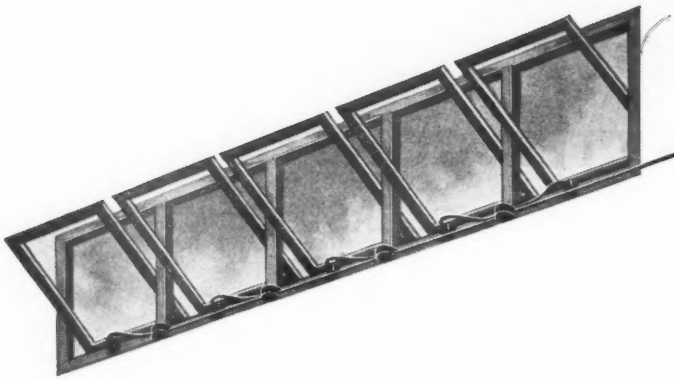
Midland District Office: Prudential Buildings, St. Philip's Place, Birmingham 3. Telephone: Central 4141
South-Western District Office: 11 Orchard Street, Bristol 1. Telephone: Bristol 23004/5
Northern District Office: St. Paul's House, 20-22 St. Paul's Street, Leeds. Telephone: Leeds 20771

BY APPOINTMENT
TO HER MAJESTY QUEEN ELIZABETH II
BRICK MAKERS



If . . .

you were down here

and your window ventilators were way up there—40 ft. perhaps—they would be virtually within arm's reach with a Teleflex Remote Control.
This is the most modern and simple approach to window and ventilator control—if you will get in touch with us we will gladly give you the fullest information.

Teleflex window and ventilator remote control

TELEFLEX PRODUCTS LIMITED · BASILDON · ESSEX

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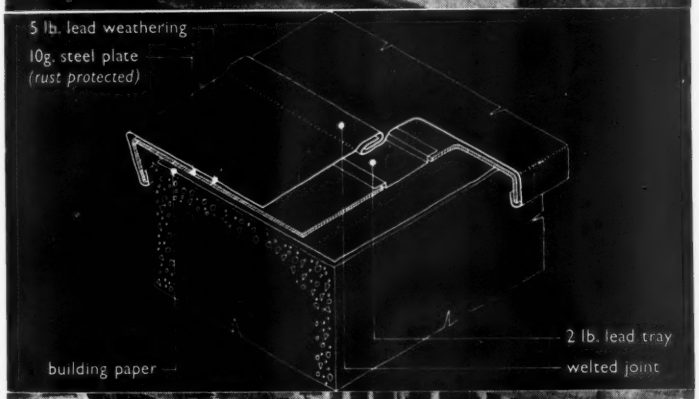
P.262



Parapets at five levels

Lead sheet weatherings to parapets—
T.U.C. Memorial Building
Architects: D. du R. Aberdeen & Partners
Contractors: Sir Robert McAlpine Ltd.

PERMANENT PROTECTION

The protection necessary for exposed surfaces is provided by no material more efficiently or more permanently than by lead. Lead is flexible, easily worked and easily dressed into position. It is unaffected by weather and it does not cause staining. Above all, it is practically everlasting, requiring no maintenance and no replacement. Lead is the final safeguard against the weather. It covers up those little chinks in the armour through which even the stoutest building may be exposed to attack.

No staining with LEAD

LEAD LASTS

The Association's Technical Information Bureau will gladly help with problems on the use of Lead Sheet and Pipe in building work. Details of the main uses are given in a series of Information Sheets and Bulletins, which can be obtained by applying to the Association.

LEAD DEVELOPMENT ASSOCIATION
18 ADAM STREET, LONDON W.C.2
Telephone: Whitehall 4175
Telegrams: Leadevep, Rand, London

is the complete answer

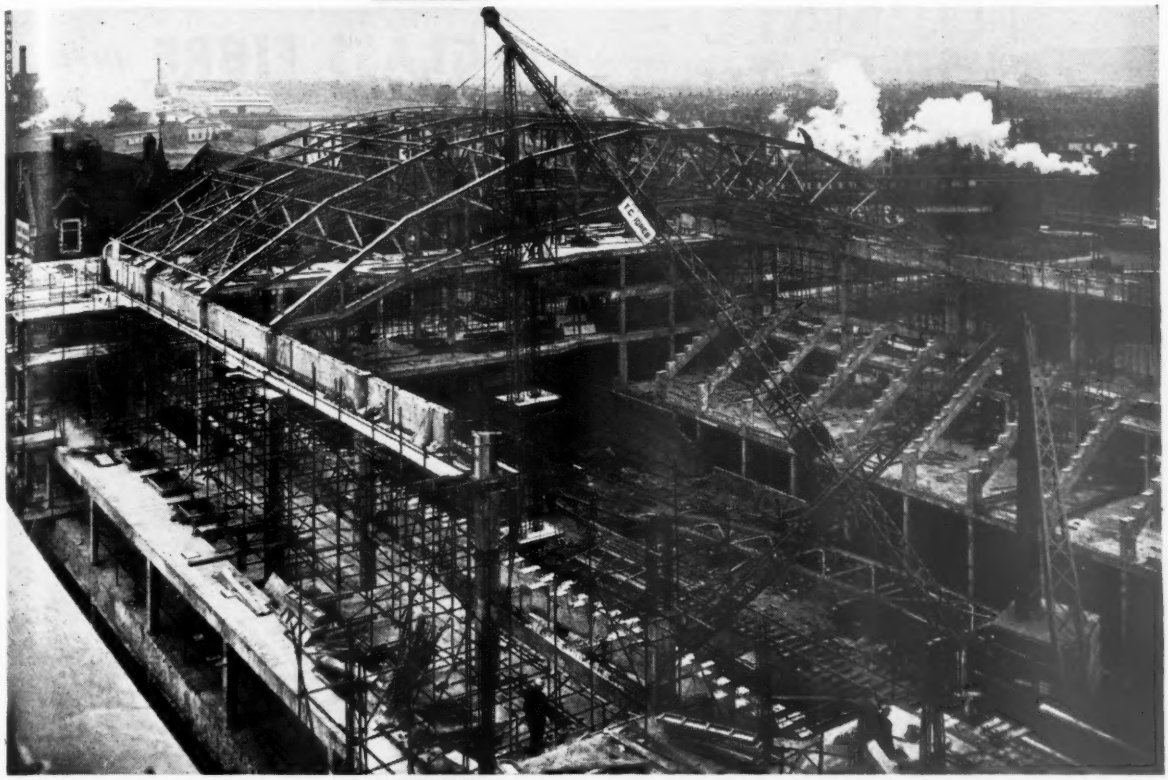
To ensure success specify THERMALITE-YTONG, the light weight, load bearing, insulating building blocks made in various thicknesses. The use of these blocks enables a high speed of laying. The blocks are easily chased and cut with a saw, fittings can be fixed direct with nails or screws. Suitable for use as both internal and external leaf of cavity wall.

For further details and technical data apply to:
THERMALITE LIMITED, Shepherds House Lane, Reading, Berkshire. Telephone: Reading 62694

STEELWORK

For the 1958 Empire Games Pool at Cardiff

A general view of the structure showing some of the 140 ft. roof trusses.



Architects : E. C. ROBERTS, M.ENG., M.I.C.E., M.I.MUN.E., M.T.P.I., A.R.I.C.S., CARDIFF CITY SURVEYOR, JOHN DRYBURGH, A.R.I.B.A., A.R.I.C.S., A.M.T.P.I., CITY ARCHITECT
in consultation with
SIR PERCY THOMAS & SON
Consulting Engineers :
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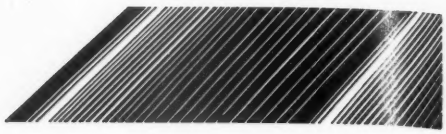
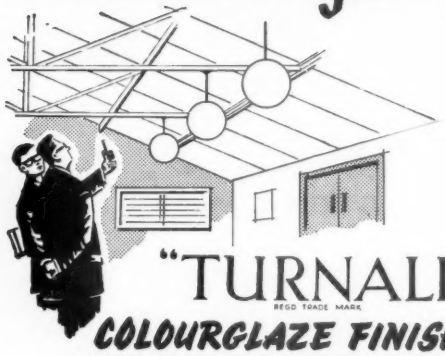
"TURNALL"
REGD. TRADE MARK
COMBINED SHEETS
(ASBESTOS-CEMENT)



WITH GLASS FIBRE INFILL

Pays for the extra cost in the first year!



"TURNALL"
REGD. TRADE MARK
COLOURGLAZE FINISH

"TURNALL" Combined Sheets are now available in an attractive range of works bonded finishes which cannot readily fade or wear (colour chart available on request). The flat inner lining can be chosen in a contrasting colour to the top corrugated outer sheet.

The development of a special Glass Fibre Infill for use with "TURNALL" Combined Sheets (Asbestos-Cement) has resulted in a double-skin insulated roof which constitutes the most economical form of insulated roof available. The introduction of the easily-fitted felted mat of rot-proof glass fibres between the double-skin cladding reduces the thermal transmittance from 0.57 to 0.35 B.t.u. / sq. ft. / hr. /°F— representing a fuel saving of no less than 1lb. of solid fuel for every 1,000 sq. ft. of roof area per hour of the heating season. (On a 1,800 hour period this saving amounts to a total of over £65.) In the case of new buildings this type of roofing enables the capital outlay for heating equipment to be reduced in addition to the subsequent saving.

TURNERS ASBESTOS CEMENT CO LTD

A MEMBER OF THE TURNER & NEWALL ORGANISATION

TRAFFORD PARK · MANCHESTER 17

Architects: Messrs. T. P. Bennett & Son

HEAD OFFICE FOR I.C.I PAINTS DIVISION AT SLOUGH

Expressed in a modern idiom, these new offices are in keeping with the world-wide prestige of I.C.I. The accommodation includes directors' rooms, boardroom, an electronic computor room, and three administration wings with a central service area. The Concrete Development Co. Ltd. undertook the structural work which is largely of pre-cast pre-stressed concrete. Facing bricks of three different colours combine with mosaic columns and continuous windows to provide a pleasing elevation.

With the experience of the past

CUBITTS

build for the future

ENGLAND · SCOTLAND · OVERSEAS

HOLLAND & HANNEN AND CUBITTS LIMITED · ONE QUEEN ANNE'S GATE · WESTMINSTER · SW1

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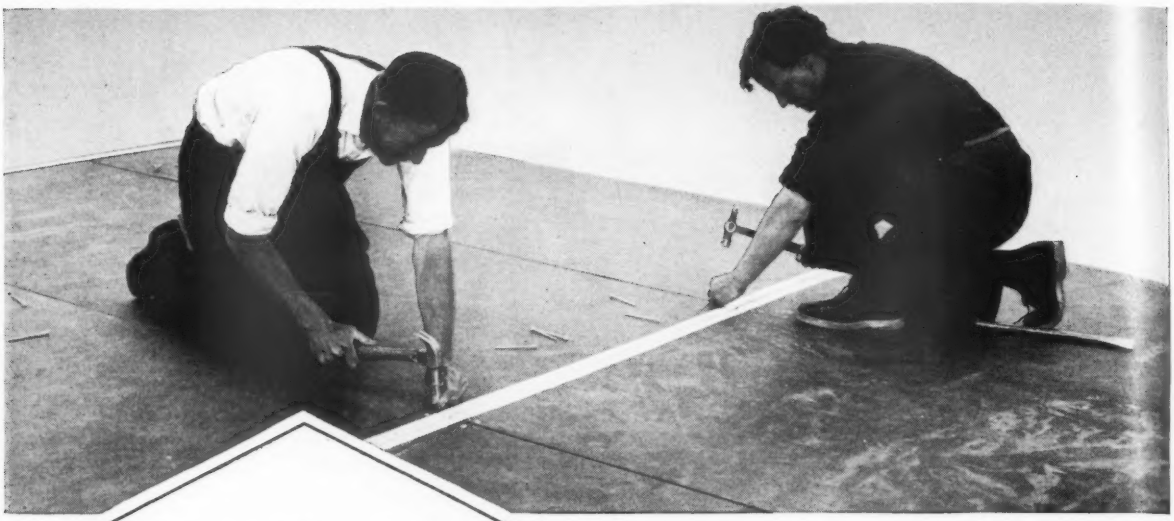


STRAMIT

roof-decking *cuts costs*

Yes, indeed! That roof-decking they're laying is Stramit—and Stramit is unique as a *low-cost*, dry-construction material. Stramit has immense strength and rigidity. And it has exceptional powers of thermal insulation (for instance, the U-value achieved by Stramit as roof-decking is 0.23, or better, depending on the type of weathering chosen). And Stramit positively defies fire. Official tests prove it—reports are available on request.

Stramit slabs are doing fine service all over the country as roof-decking, wall-linings, ceilings and partitions. A special low-density grade is also available for non-load-bearing thermal insulation. A felted Stramit roof costs from only 27/6 to 30/– per square yard, supplied and fixed. Why not use Stramit next time?

What is Stramit?

Stramit is made from scientifically-compressed straw. It is available in three grades (Roofing, Standard and Low-density) and three facings (hardboard, fabric and a special asbestos facing which gives a Class I rating for spread of flame).

Stock sizes: 4 ft. wide x 6, 8, 9, 10 and 12 ft. long. **Special sizes made to order**

FILL THIS IN AND POST IT NOW!

PLEASE SEND ME WITHOUT OBLIGATION FULL DETAILS OF

Stramit slabs for use as roof-decking · wall-linings ceilings · partitions · thermal insulation*

* *Delete where inapplicable*

Name .....

Address .....

For the attention of R.I.B.A./8

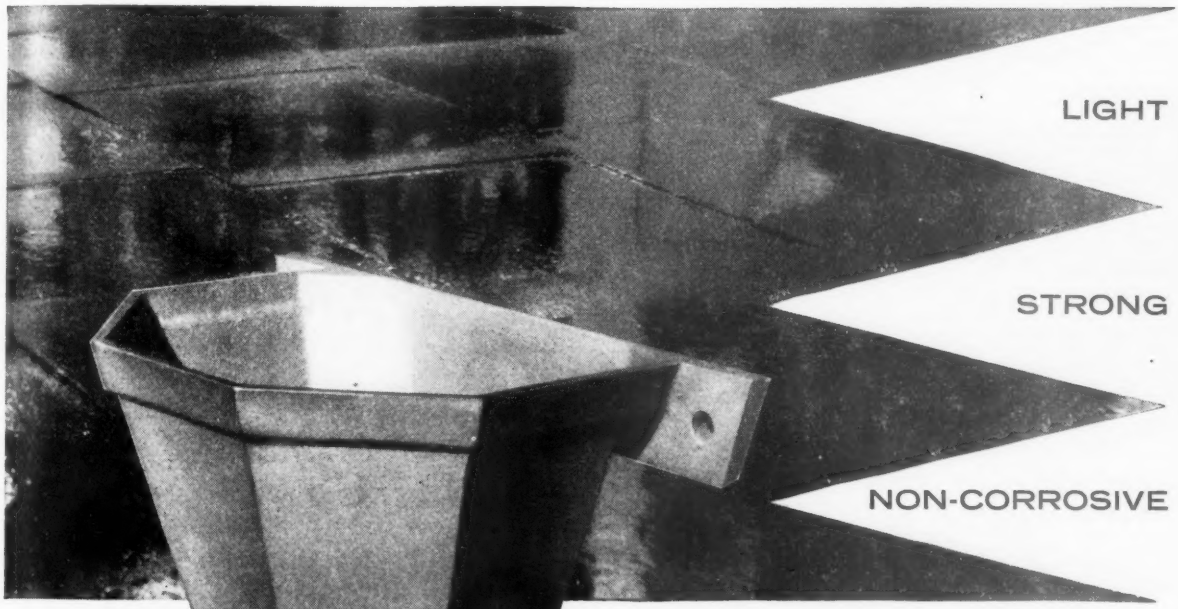
STRAMIT

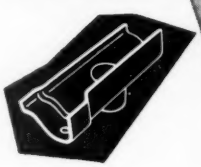
— THE TWO-INCH THICK

BUILDING SLABS

STRAMIT BOARDS LTD · *COWLEY PEACHEY, UXBRIDGE, MIDDLESEX* *Telephone: West Drayton* 3751

They're better in Hiduminium





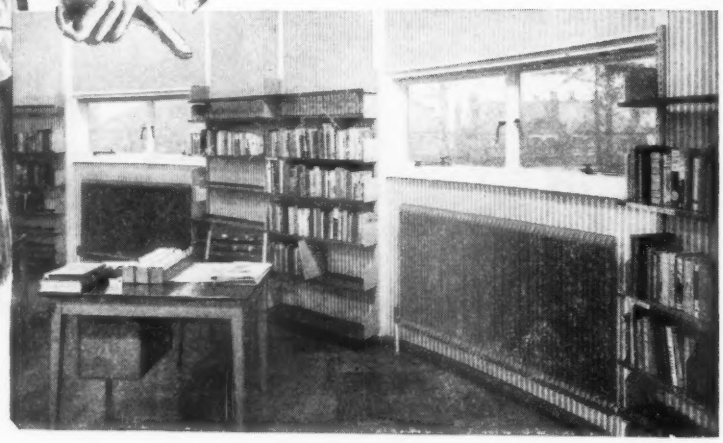
Rainwater goods in Hiduminium are both light and strong. They are easier to handle, easier to fit. And are less prone to damage in transit. They need no painting; they do not rust; and are unaffected by frost, however severe.

Specify Hiduminium rainwater goods

HIGH DUTY ALLOYS LTD · SLOUGH · BUCKS · TELEPHONE SLOUGH 23901

Everybody Knows a Stelrad

Ye canna get more economical heating for the wee bairns



Stelrads in the Library of a L.C.C. school.

Aye! It's true friends. You cannot get more economical heating than central heating, and you cannot get a better central heating radiator than a Stelrad. A Stelrad is a brawny radiator—made of steel, oxy-acetylene welded for greater strength. Aye! and will ye no remember the Stelrad range? It's complete with two, three, four and six column types, wall, Easy Clean, angled wall, double, and triple banked wall, each available in many heights and to almost any length. And do ye ken the many Stelrad installations like the one above, and do ye ken the Stelrad Catalogue? Ye should send for that mon—it's free.

STEEL RADIATORS LIMITED

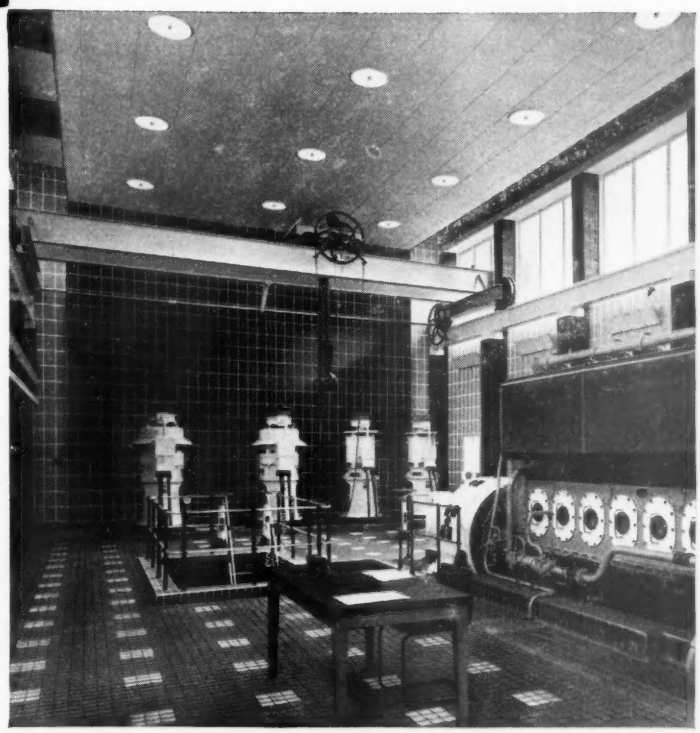
BRIDGE ROAD . SOUTHALL · MIDDLESEX

Telephone: Southall 2603

HERTS & ESSEX WATER COMPANY

choose Ceramic Tiles

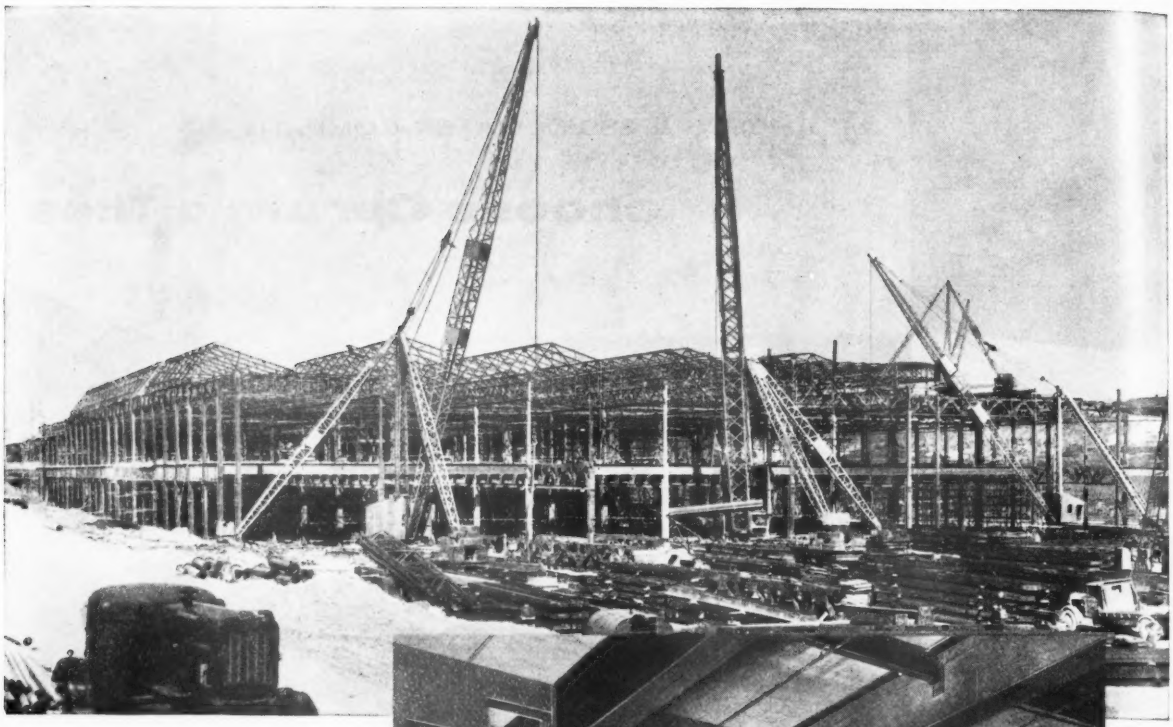
. . . providing an excellent illustration of the colour and interest which wall and floor tiling bring to a purely functional structure. The blue and white tiles used in this Pumping House at Sawbridgeworth need minimum maintenance—in years to come they will look equally attractive.

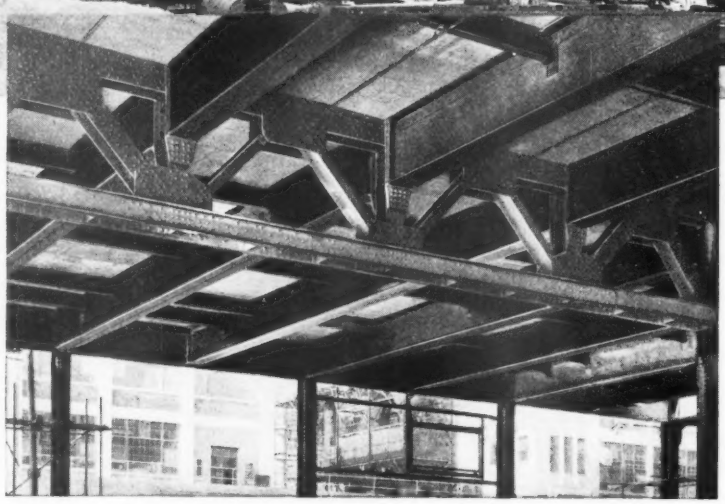


Architects: Scherrer & Hicks, London. Tiling Contractors: Carter & Co. (London) Ltd.

Ceramic TILES

Glazed & Floor Tile Manufacturers' Association · Federation House · Stoke-on-Trent





VAUXHALL MOTORS LTD. LUTON

Extension to Factory

Architects:
Howard Souster & Fairbairn
Consulting Engineers:
G. A. Dodd & Partners
Contractors:
Sir Robert McAlpine & Sons Ltd.

Approximate total weight 20,000 tons, of which over 17,000 tons were erected in twelve months. The lower illustration shows one of the 168 main girders supporting the assembly floor.

STEEL STRENGTH SECURITY

STEELWORK BY

REDPATH BROWN

LONDON OFFICE: 3 DUNCANNON STREET, LONDON, W.C.2

G.E.C. LIGHTING AT LLOYDS OF LONDON

'THE ROOM'

The General Electric Co. Ltd. have supplied the majority of the lighting fittings for Lloyd's—London's largest new building. 'The Room' is illuminated by approximately 15,000 ft. of Osram cold cathode tubing installed in the laylights and 600 circular fittings.

Architect: T. E. HEYSHAM, F.R.I.B.A.
Consultants: OSCAR FABER & PARTNERS
Contractors: HIGGINS & CATTLE LTD.

G.E.C.

The General Electric Co. Ltd., Magnet House, Kingsway, London, W.C.2

"Why was this necessary."

By Courtesy of
Ashton-under-Lyne
Reporter.

"Because he had no other way of escape."

"MURILITE" Pre-mixed Perlite Plaster, which has attained a Grade A (6 hours) Fire Protection Rating, could have resisted the spread of flame for a long enough period to have permitted him to use the normal exits.

Complete details of the test made in accordance with the British Standard definitions No. 476:1953 are contained in the F.R.O.S.I report No. 621:1955.

"Murilite"
REGD. TRADE MARK
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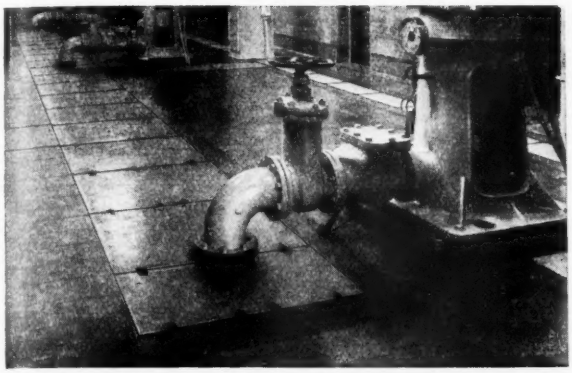
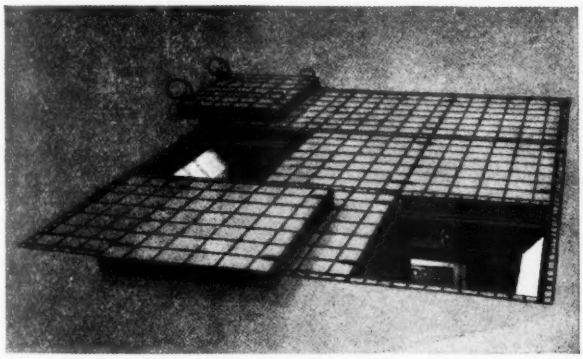


'Elkington Gatic' medium light duty duct covers, installed in Kings Road Pumping Station for the Bury St. Edmunds Corporation.



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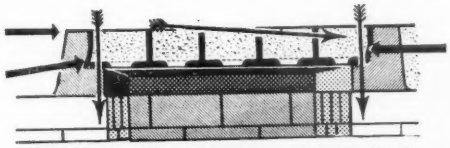

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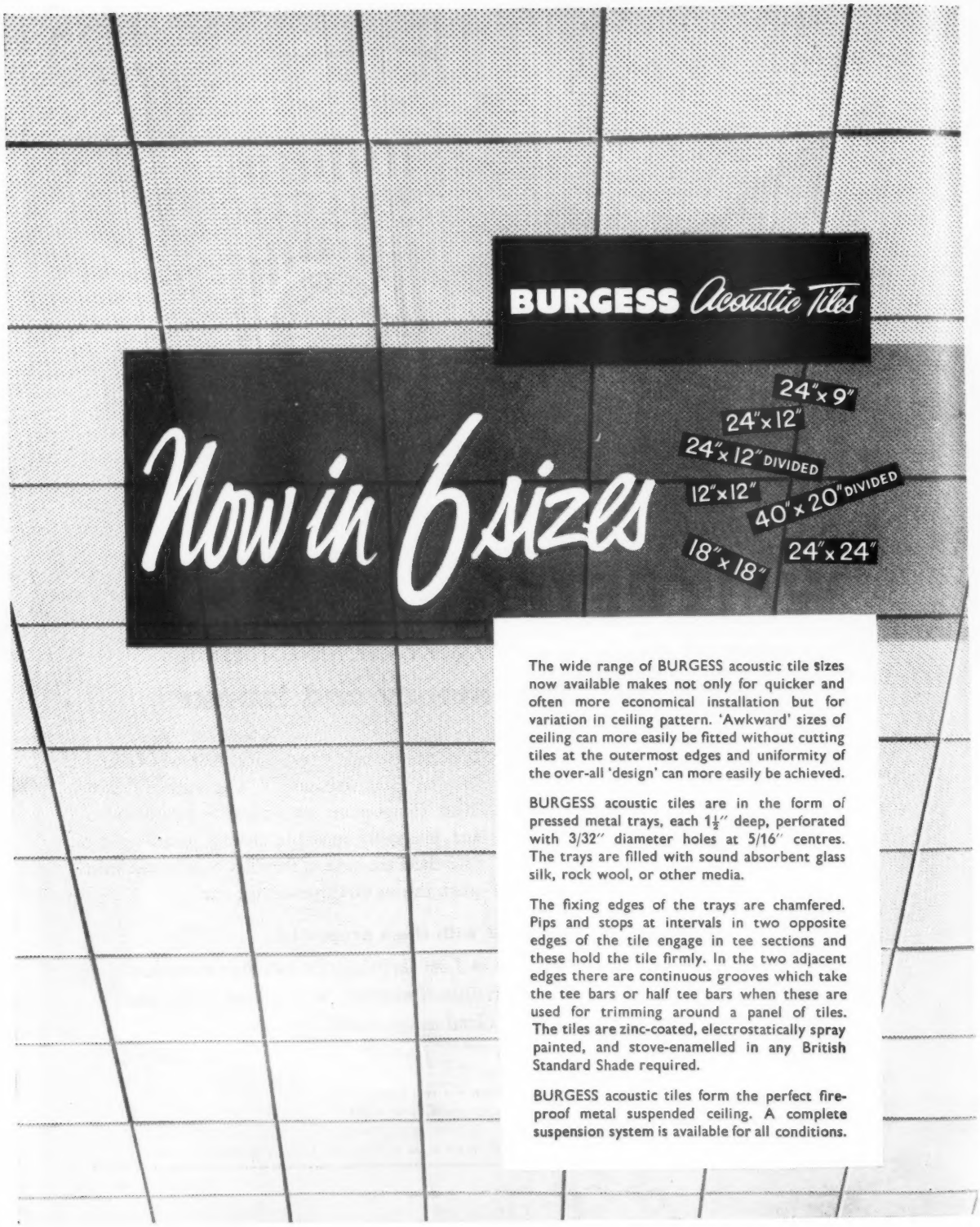

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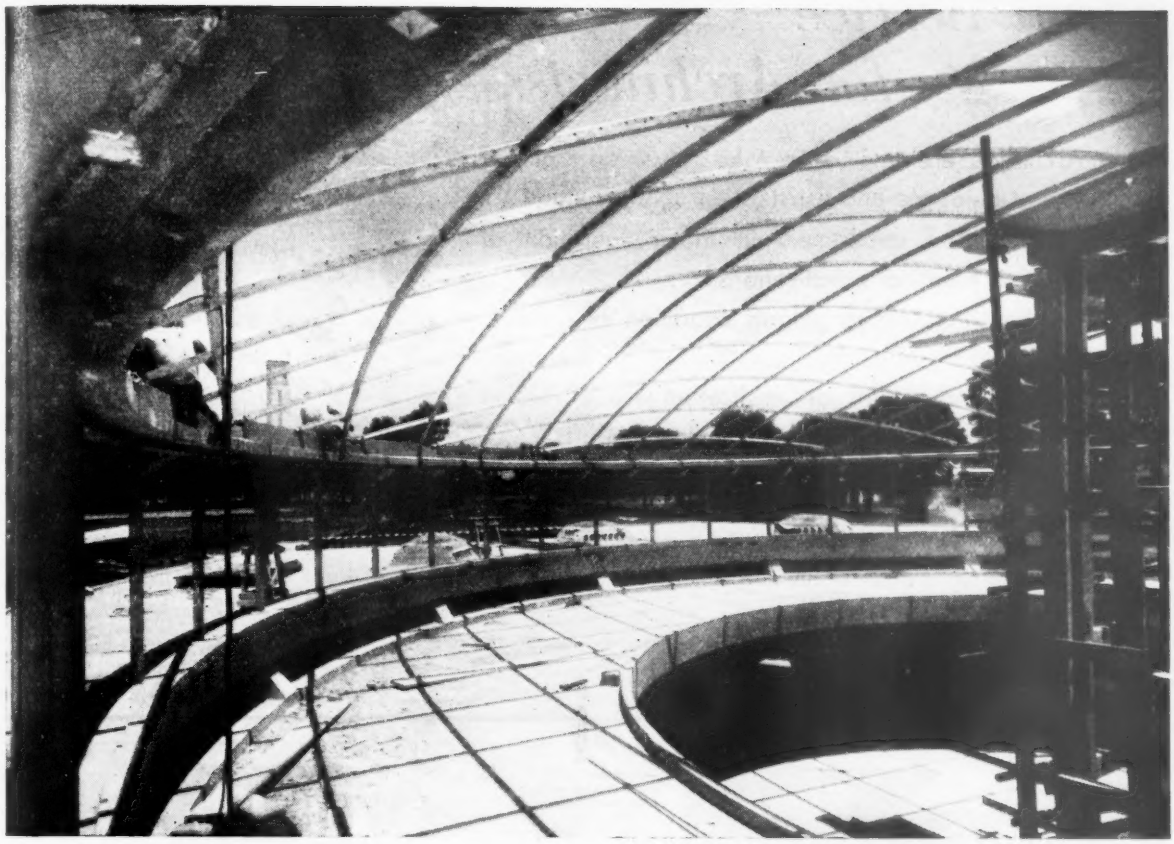
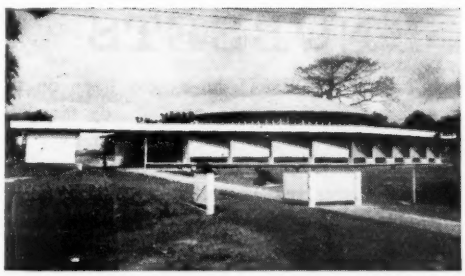


British Aluminium for Ghana National Museum



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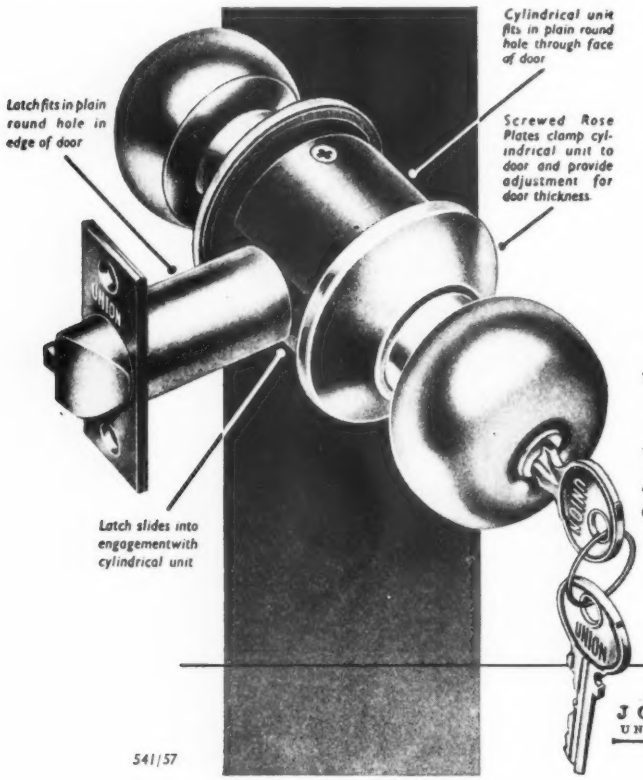
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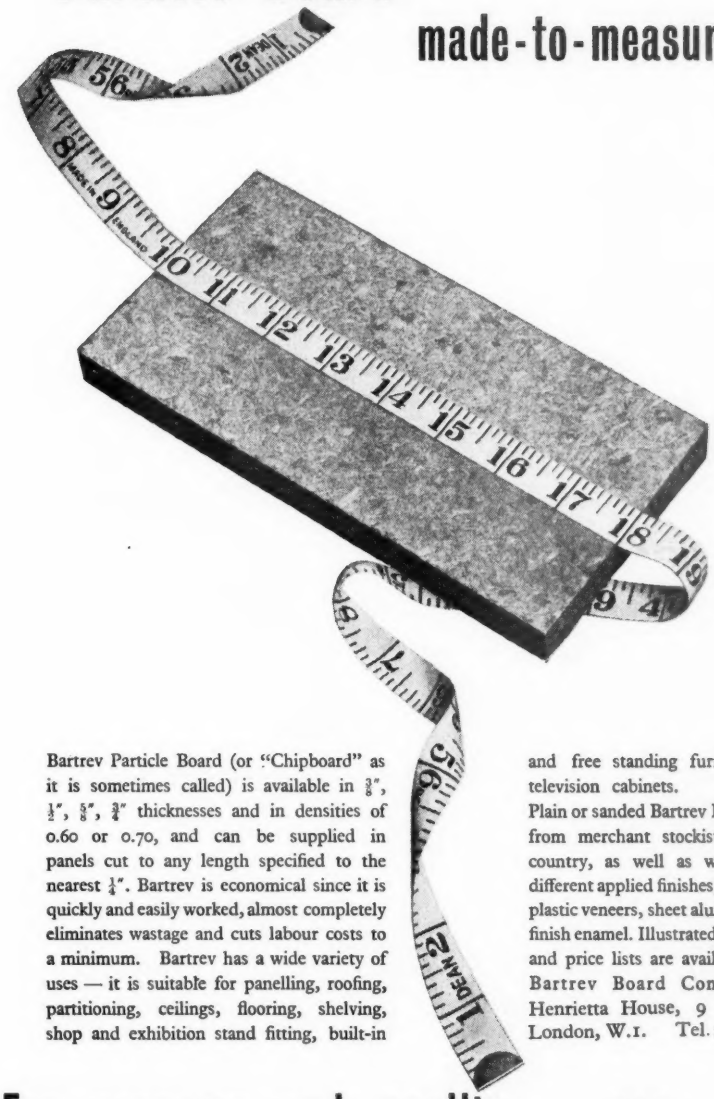

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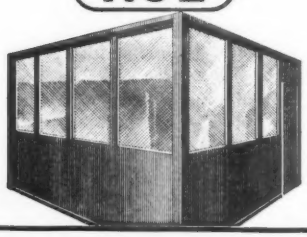

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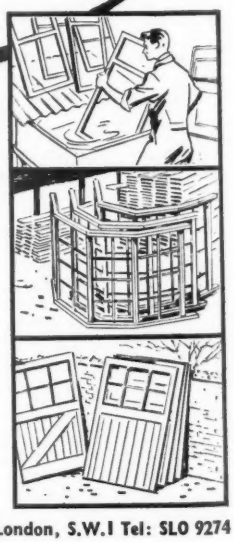

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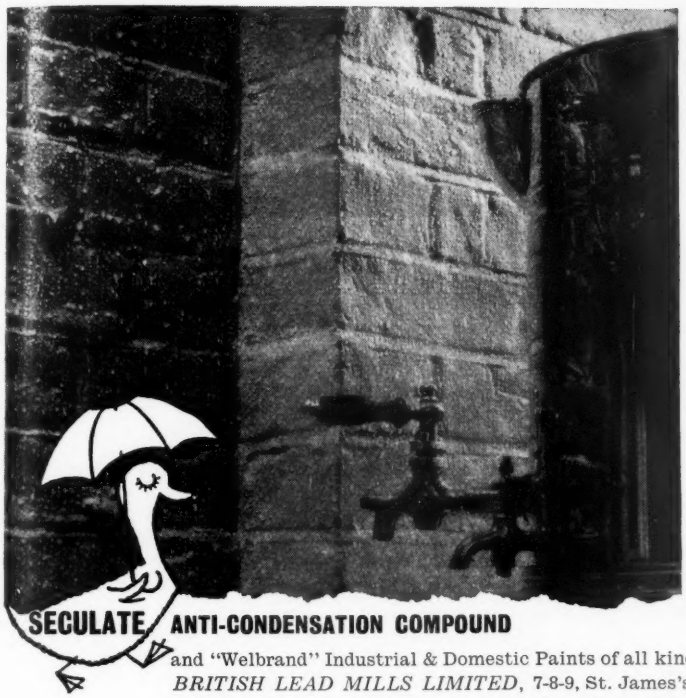

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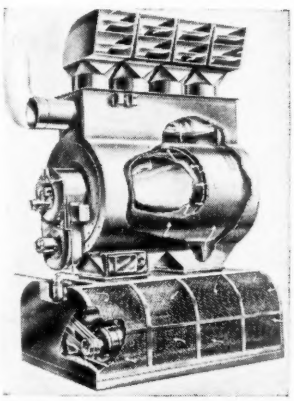

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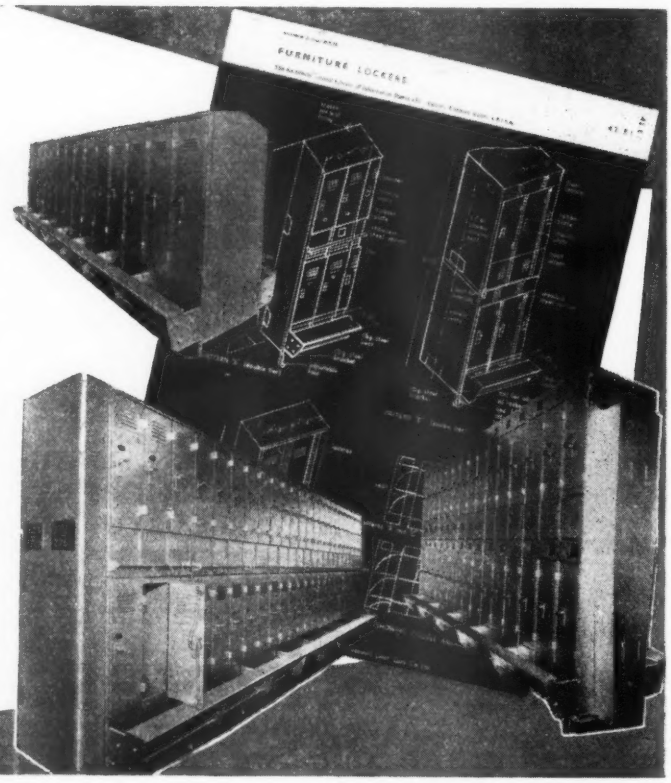

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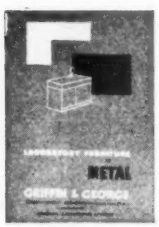

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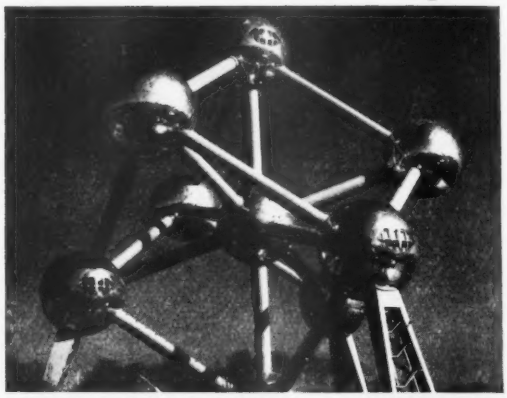

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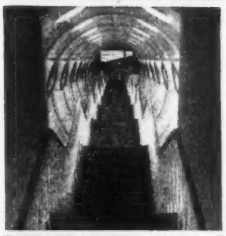

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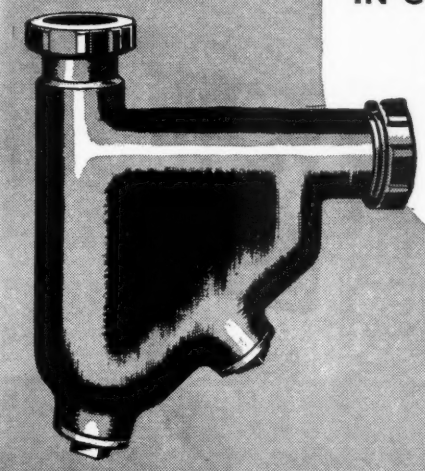

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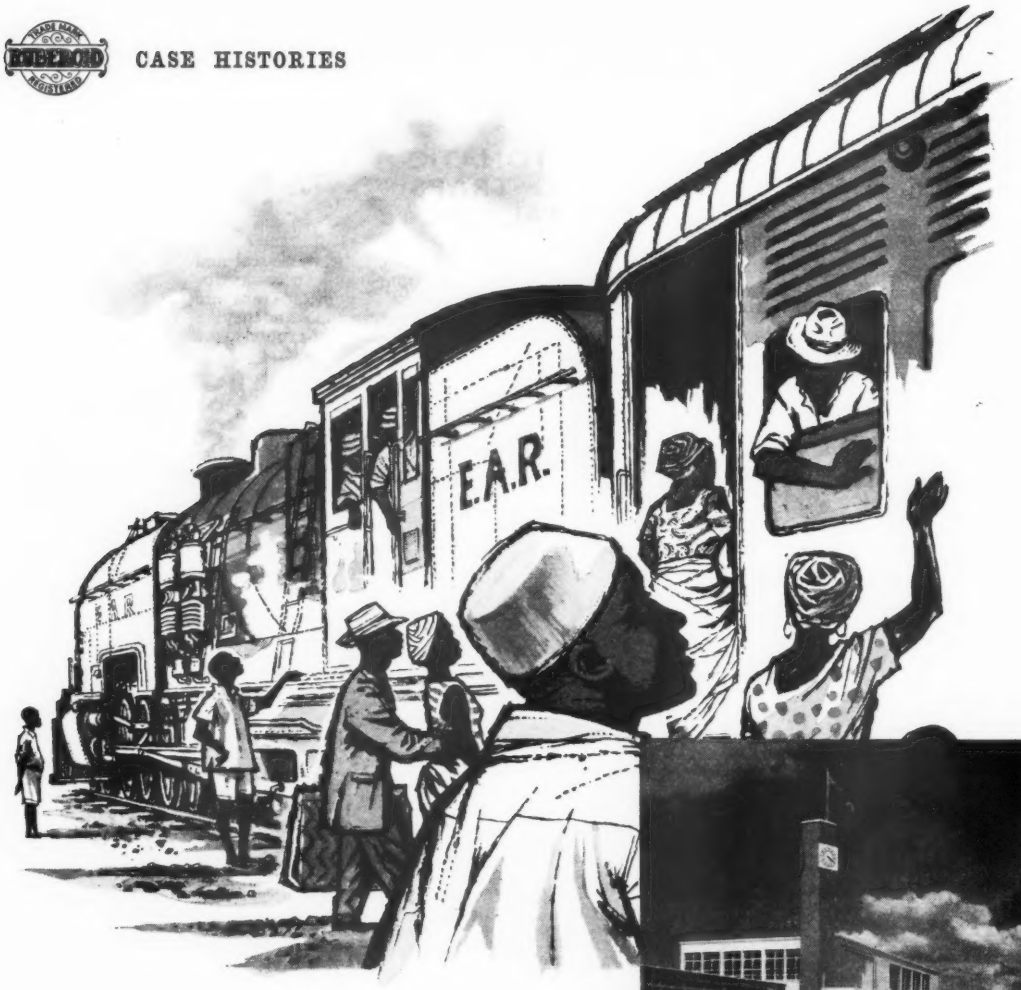

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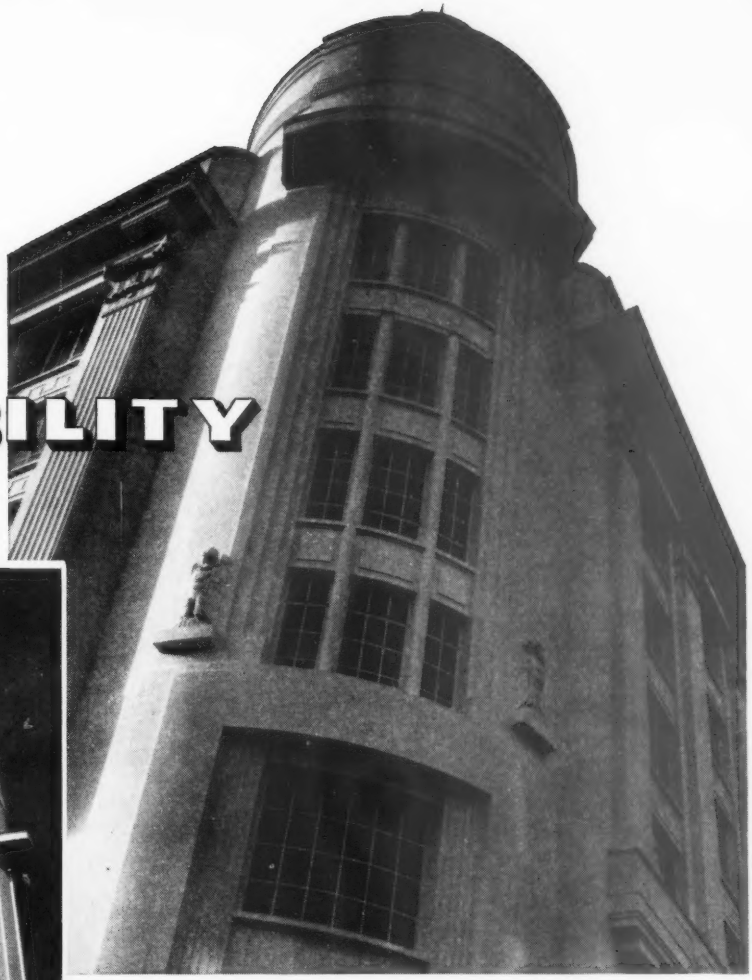

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